JOURNAL OF CONSULTING PSYCHOLOGY

VOL. IX, NO. 5
SEPT.–OCT.
1 9 4 5

CONTENTS

ALFRED BINET: FRENCH PSYCHOLOGIST — FRONTISPIECE

FOUR YEARS OF A COLLEGE ADJUSTMENT CLINIC — FRED McKINNEY
I. ORGANIZATION OF CLINIC AND PROBLEMS OF COUNSELEES 203
II. CHARACTERISTICS OF COUNSELEES 213

SOME CONTRIBUTIONS OF NON-DIRECTIVE METHODS TO COLLEGE COUNSELING — ARTHUR W. COMBS 218

THE VALIDITY OF THE AMPLIFIED MULTIPLE CHOICE RORSCHACH AS A SCREENING DEVICE — RACHEL F. MALAMUD AND DANIEL I. MALAMUD 224

SIDELIGHTS ON THE USE OF INTELLIGENCE TESTS — DONCASTER G. HUMM 228

THE USE OF CERTAIN STANDARDIZED TESTS IN THE SELECTION OF INSPECTORS IN AN AIRCRAFT FACTORY — A. Q. SARTAIN 234

FUNCTIONS OF A PSYCHOLOGIST IN A RESIDENTIAL SCHOOL FOR THE DEAF — HELMER R. MYKLEBUST 236

A NOTE ON PSYCHOTHERAPY — RAY H. BIXLER 238

TRAINING IN CLINICAL PSYCHOLOGY — DAVID SHAKOW 240

GRADUATE INTERNSHIP TRAINING. REPORT OF SUBCOMMITTEE 243

BOOK REVIEWS: A GUIDE TO PUBLIC OPINION POLLS — THE PEOPLE'S CHOICE — PERSONNEL WORK IN SCHOOLS OF NURSING — EMOTIONAL FACTORS IN LEARNING 267

AMERICAN · ASSOCIATION · FOR · APPLIED · PSYCHOLOGY

VOLUME IX SEPTEMBER-OCTOBER, 1945 NUMBER 5

JOURNAL OF CONSULTING PSYCHOLOGY

PUBLISHED BY THE AMERICAN ASSOCIATION FOR APPLIED PSYCHOLOGY, INC.

EDITOR

MRS. J. P. SYMONDS, 525 West 120 Street, New York 27, N. Y.

ASSOCIATE EDITORS

HAROLD E. BURTT, PH.D., The Ohio State University
HAROLD E. JONES, PH.D., University of California, Berkeley
ARTHUR W. KORNHAUSER, PH.D., University of Chicago
BERTHA M. LUCKEY, PH.D., Board of Education, Cleveland, O.
CARL R. ROGERS, PH.D., The Ohio State University
GOODWIN WATSON, PH.D., Teachers College, Columbia University
F. L. WELLS, PH.D., Department of Hygiene, Harvard University

The JOURNAL OF CONSULTING PSYCHOLOGY is the official journal of the American Association for Applied Psychology, Inc., which was organized in 1937 as an amalgamation of the Association of Consulting Psychologists, Inc., and the Clinical Section, American Psychological Association, Inc., with the affiliation of regional associations for applied psychology.

The JOURNAL OF CONSULTING PSYCHOLOGY publishes results of research bearing on the application of psychology, short articles and communications relating to professional psychological service, official reports of the activities of the American Association for Applied Psychology, Incorporated, and of other organized groups of professional psychologists with representation in its Board of Affiliates, information and notices of interest to psychologists, resources available to the profession, and critical reviews of the professional literature. Contributions are invited from all fields which are significantly related to applied psychology.

EDITORIAL OFFICE

Manuscripts, general correspondence and publications intended for notice or review should be sent to Mrs. J. P. Symonds, *Editor*, 525 West 120th Street, New York 27, N.Y. Manuscripts are accepted only upon recommendation by the editorial staff. Proof will be submitted to the author at the time of publication. Corrections made by the author are chargeable to him. Manuscripts should be submitted in duplicate. References to publications should conform to the style of this JOURNAL giving in order: name of author, title of article, full name of periodical, year, volume, number, pages. References to books should give in order: author's name, title of book, place of publication, name of publisher, year, pages. Articles in this JOURNAL are indexed in *Psychological Abstracts*.

BUSINESS OFFICE

JERRY W. CARTER, JR., PH.D., *Business Manager*, Wichita Child Guidance Center, 3422 East Douglas Avenue, Wichita 8, Kansas.

Correspondence regarding subscriptions and business matters should be addressed to the publishing office at Colorado Springs, Colorado, or to JERRY W. CARTER, JR., PH.D., *Business Manager*, Wichita Child Guidance Center, 3422 East Douglas Avenue, Wichita 8, Kansas.

The JOURNAL OF CONSULTING PSYCHOLOGY is published bimonthly six times a year. All members of the American Association for Applied Psychology are entitled to receive the JOURNAL upon payment of their annual dues, of which $2.50 is applied to the JOURNAL. Affiliated state or regional associations may arrange a group subscription with the Business Office through their Representative in the Board of Affiliates whereby members of the group subscription are entitled to receive the JOURNAL upon payment of $2.50 added to the dues of their association. The individual subscription is $3.00 a year and single copies are 60 cents a number. Postage is prepaid. Claims for nonreceipt of a number will be honored in the Business Office within two weeks after receipt of the next succeeding number.

Copyright 1945 by American Association for Applied Psychology, Inc. Printed at 28 West Colorado Avenue, Colorado Springs, Colo., and entered as second-class matter at the Colorado Springs, Colo., post office.

ALFRED BINET, FRENCH PSYCHOLOGIST 1857-1911

(Reproduced from a portrait in the collection of the late Professor Rudolph Pintner, by courtesy of his wife.)—EDITOR.

Volume IX SEPTEMBER-OCTOBER, 1945 Number 5

JOURNAL OF CONSULTING PSYCHOLOGY

FOUR YEARS OF A COLLEGE ADJUSTMENT CLINIC[1]

I. ORGANIZATION OF CLINIC AND PROBLEMS OF COUNSELEES

BY FRED McKINNEY
UNIVERSITY OF MISSOURI

THE OBJECTIVE of this study is to ascertain the nature and extent of the complaints of students applying to a student adjustment clinic, as compared with the complaints of an unselected group, and to relate these findings to those published by other college adjustment clinicians. It is appropriate that the general nature of the clinic be outlined before these data are presented.

ORGANIZATION OF CLINIC

Establishment of clinic

The "Personality Clinic" of the Student Health Service at the University of Missouri was established in the fall of 1938 by Dan G. Stibe, M.D., director of the service. It was purposed to meet the needs of the increasing number of students who referred themselves because of emotional symptoms and complaints which were not explained in terms of physical examinations. Its broader objective was to prevent emotional disturbances which threaten the efficiency, happiness, and normal development of the student and to detect the small percentage of students who are seriously in need of extensive professional services not provided by or compatible with the administration of a university clinic. It was a part of a broader personnel outlook assumed by the Health Service. At the same time this clinic was established, a secretary was secured to obtain information on students' housing, diet, financial status, and general environment.

The purpose and general organization of the clinic is roughly similar to that reported by clinicians in other institutions as a part of the health or personnel service [1, 2, 4, 7, 9, 12, 13, 17-24]. The formal establishment of the clinic coordinated and extended the previous efforts of the physicians of the Health Service and the clinical psychologist in the College of Arts and Science in their attempts to aid students to adjust their emotional problems. As in the case of some of the above clinics directed by psychologists, the services include testing, vocational counseling, analysis of study techniques, and extra-curricular orientation [13, 18, 23, 24].

[1] Clerical assistance in the preparation of this article was provided by the University Research Council, University of Missouri.

Administrative details

The Personality Clinic is housed by and has access to the full facilities of the modern Health Service and hospital. Physical examination, medical history and personnel records are available before the student is counseled by the clinical psychologist. Staff physicians and specialists are available for consultations and referral of students. The clinical psychologist has office hours for interviews two and one half hours daily and may be reached for special appointment in the case of emergencies. These hours are divided into half hour appointment periods. The remainder of his time is devoted to the teaching of courses such as Applied Psychology, Psychology of the Individual, and Mental Hygiene in the College of Arts and Science. A receptionist is available for the appointment period. A mature, confidential secretary transcribes Ediphone notes on all interviews, collects records of aptitude scores, grades, psychoneurotic inventory scores, and miscellaneous reports from various offices on each student who applies for counsel.

Records

The above-mentioned records are kept in separate case folders for each student interviewed. Followup letters are sent to the students at the end of each year in which they are counseled. The entire case material is arranged and filed with the purpose of its use in future clinical research.

Supplementary records appropriate to the problems presented by the students are secured after rapport is established. If the student's problem is a mild one, or if he applies for advice on a matter that can be discussed in a single interview, he may not be asked to fill in other blanks. Seventy per cent of the first 200 cases filled in Pre-Interview blanks. Of a later 100, 53 per cent filled in Pre-Interview blanks. It is interesting to note that with experience the clinician used standard blanks less and less. The student is told that the Pre-Interview blank "will save both you and me time, give you an opportunity to think your problem through and to acquaint me more thoroughly with you." The Pre-Interview Blank has been published [15]. It consists of a nine-page mimeographed pamphlet with sections on:

1. Contemporary Life (Identification, ability and achievement, physical health, college activities, interests and plans, present living conditions, attitudes, problems, and personality traits).
2. Previous History (Including information about the following during the individual's development: parents, other members of family, health, recreation, athletics, sex, social life, school, extra-school experiences, and inner life).
3. Student's Summary of his Emotional Development.

At present norms are being established for the Pre-Interview blank. Differences in pre-interview responses by various clinical referees and unselected students are being determined.

If the student does not appear to be too sensitive and if the counselor has not secured information about the student's personality from another source, he is sometimes asked to obtain anonymous *acquaintance ratings* on a standard rating scale used by the clinic. He is given self-addressed envelopes and the blanks are returned directly to the clinic. This blank has been published [15.] It includes these scales: efficiency, emotional stability, social adjustment, appearance, leadership, integrity, and motivation. As a part of this blank there are 74 descriptive adjectives and

phrases which may be underlined as a means of describing the individual and several blank lines for voluntary comments. The student is cautioned to obtain ratings from persons who will be frank and who will give useful information about his true status. In all cases, full *notes on the interview* are dictated when the student leaves the office.

The mimeographed *followup letter* reminds the student of the conference during the year, explains why the letter must be of the "circular" type, but impresses upon the student that his reply will not be treated as a datum in an experiment. He is requested to fill out an attached questionnaire but told to write a letter or to use the back of the sheet for an informal reply if preferred. The questionnaire repeats parts of the Pre-Interview Blank and from a comparison of the two blanks progress may be noted in grades, attitudes, and extra-curricular behavior.

The student is cognizant of all the information that is being obtained about him. The whole effort is a cooperative one. The Pre-Interview Blank is his view of his life, problems, and successes. The rating blanks give the impression he has made upon his associates. Aptitude tests, the adjustment inventory, school grades, personnel reports, and hospital records represent five objective checks on some of the above information as well as supplementary material.[2]

These records are the sources for the analysis of the student's problems and for the determination of a program of readjustment. They are later used when followups are received, in an attempt to evaluate the readjustment program. They are rather systematically collected, keeping in mind always the personalistic and therapeutic objective of the service.

All records are kept under a clinical number and all names and identifying clues are deleted from the material. The index file of clinical numbers is open only to the psychological clinician and the confidential secretary. One of the strongest convictions of the clinic is that the confidence of the student must be meticulously respected. The student is not discussed with anyone without his knowledge.

Means of reference

Another strong conviction of the clinic is that the initiative for conferences should rest with the student. Even when the student is referred for disciplinary reasons he is first asked if he wishes the conference. He is not encouraged to discuss his problem until he is convinced of the value of the conferences.

To every incoming student (a total of 1,645 in 1940-41) the purposes of the Personality Clinic are explained at the meeting during which the psychoneurotic inventory is administered. This occurs during the early weeks of the term. The services of the clinic are discussed as follows:

A student may refer to the Personality Clinic to obtain information concerning his personality traits, emotional life, habit systems, and attitudes just as he may refer to the heart, or ear, eye, nose and throat specialist. The personality clinic is a part of the Health Service for administrative reasons, but its connection there does not signify that it deals with ill students. We consult with normal, typical students who are seeking information about themselves. Students who have difficulty talking about themselves and who are

[2] In recent years the non-directive approach to counseling is being used more often and blanks filled in by students and associates are used less.

reluctant to discuss their traits and attitudes are especially invited because they profit most by the conferences. Students who are advised by their friends and associates to seek professional advice are most welcome. Students who have important decisions to make are encouraged to discuss them with the clinician, their deans, advisers or coaches. The clinic is one of the several means for keeping the student from feeling he is alone and stranded in a strange, inhospitable environment.

After this discussion, and when "personality scores" are interpreted and the students express their reactions to the scores on questionnaires, a large number of students ask for appointments. Others come to the Health Service receiving desk and ask for an appointment.

Occasional supplementary publicity is given the clinic in carefully checked newspaper feature articles and talks before student and adult groups. Moreover, the clinician is active as an extra-curricular adviser.

Of the first 200 cases, 42.5 per cent referred themselves, 33.5 per cent were referred by the Health Service personnel (doctors and nurses), 7.5 per cent were referred by friends and fellow students, 7 per cent by deans and faculty, and 3.5 per cent by parents and relatives. In 6 per cent of the cases the source of reference is unknown.

Records of 100 consecutive referrals in the third year of the operation of the clinic (September 1941 through December 1941), after it had been well established, indicated that 67 per cent had referred themselves, 7 per cent were referred by the Health Service personnel, 14 per cent by friends and fellow students, 5 per cent by deans and faculty, 4 per cent by fraternity chaperons, and in 3 per cent of the cases, the referral was unknown. The greatest change in source of referral is in the increased tendency for students to come into the clinic voluntarily instead of being sent by the Health Service personnel. It is a change that is encouraging. Another change was the addition of a new source of referrals—fraternity and sorority chaperons.

These results are similar to those published from other clinics [2, 4, 7, 19, 21]. The greatest difference is that a greater percentage of the referrals come into this clinic on the student's own initiative and at the suggestion of his fellow students. This probably can be explained in terms of the initial meeting with incoming students at which the functions of the clinic are explained and the invitation is extended.

PROBLEMS AND SYMPTOMS OF COUNSELEES

"Problems" as presented by students

Before presenting a classification of symptoms or complaints there is reproduced below a group of running accounts of typical complaints as given by the student on entering the clinic, or by his referent. This dynamic approach to "problems" as the subject sees them indicates the relationship of the symptoms to the complex social background and to one another. These eleven accounts are selected as representative of the heterogeneous "problems" referred to the clinic.

Representative "problems" as presented by students or referents

Student was referred by clinic doctor. Symptoms which brought her to the hospital: Had nausea, desire to vomit, discomfort on right side, and loss of appetite. There were no physical findings except a temperature of 99°. Developed during interview that she couldn't get along with her employer.

Came in voluntarily and discussed his relationships with students his own age and of the opposite sex. Has always spent too much time in extra-curricular activity instead of develop-

ing these relationships. Also discussed his vocational choice.

Student was referred by members of the faculty because he seems to have ability but was making low grades. Also believed he had acne and was very sensitive about it. His mother had told him this was caused by masturbation and his relationships with the opposite sex. This worried him. He said he felt inferior and lacked confidence; was also concerned about his mother who is emotionally attached to him.

The sorority wanted to depledge this girl because her behavior was annoying and her conduct not becoming. She couldn't get along with the other girls, refused to cooperate in fulfilling her responsibilities toward the house, ignored criticism and suggestions, and her conduct on dates was not acceptable. She is regarded as a detriment to the house and was put on probation.

Student had had rheumatic arthritis, was unable to walk and then, after treatment, was cured. Through occupational therapy, he helped cure himself. Problem now is going down steps. He is afraid to go down one foot over the other, and instead descends one foot at a time. Wanted to know if fear had anything to do with this.

Student was worried over a $300 debt. She comes from an Italian Catholic family and feels she is too inhibited with boys. She has not had much experience with them. She has broken away from her religion and no longer attends church.

Girl is engaged to a boy who wants to be a psychiatrist. They want to get married before the boy is able to support them. The mother is opposed to the marriage.

Student was depressed and wanted to leave school. She was worried about her grades. She didn't know what profession to enter. She started out in Physical Education, transferred to Home Economics, and now doesn't like either of them.

Student had broken up with his girl friend because she started going with other fellows. He doesn't get along well with other fellows at the dorm and in various organizations. He is very stubborn and dogmatic, but has high standards and is very ambitious.

Student was referred by the Dean. He had been suspended for cutting classes and reinstated on condition that he not cut again. He cut and was awaiting expulsion. Believed he was not the type to attend classes; said his intellect was too high and the classes were too easy! He blamed the school. His fraternity brothers had told him to mend his ways or get out. He refuses to fit into their routine and displays preposterous plans and characterizations of himself.

Student wanted suggestions about getting along with other fellows. He is too hostile and has a temper. He is sensitive about being a Jew, is not prone to admit his Jewish ancestry and hasn't got along well with Jewish boys. He was unhappy and also a major health problem.

A casual reading of the above accounts reveals that rarely does the individual present a single complaint. Further, the various problems presented by a given individual may be quite dissimilar. Students vary in the number of complaints they present. These symptoms will also vary greatly from physical to complaints that are highly symbolic.

Classification of student "problems"

The complaints, such as presented above, of the first 200 consecutive cases and of 100 consecutive cases taken from the files three years later were classified and tabulated separately to indicate any changes which might have occurred and to serve as a rough index of the reliability of the trends found. A third group of 100 problems was *selected* from a two-year period beginning three years after the clinic was established. This group differed from the other two in that it was *not* made up of cases in a strict consecutive order. Only those cases were included which were complete in most details of information. They are, therefore, cases which have been more thoroughly studied. Below is an outline of the classifications and the percentage of students of each group of cases, indicating these problems.

Classification of problems and symptoms (complaints) in terms of predominant aspect

The first figure is the frequency of complaints in the first 200 consecutive cases (in

parentheses is given the percentage of 200 cases), the second figure is the frequency of complaints in 100 consecutive cases collected three years later, the third figure is the frequency in 100 cases selected on basis of completeness of information three years later and extending over a two-year period.

I. Social (Social situation predominates but emotional factors often also involved) 78 (39 per cent)-27-35
   a. Adjustment to fellows (No friends, "personality needs improvement") 28-16-10
   b. Shyness, withdrawal, sensitiveness 18-1-3
   c. Inferiority and lack of self-confidence 14-6-12
   d. Self-consciousness (lacking poise) 2-1-5
   e. Personality test score and pre-interview blanks (Inquiry or concern) 8-2-0
   f. Fear of losing status or position (fraternity blackball) 4-1-2
   g. Attitude toward fraternity 3-0-2
   h. Stuttering, speech defect 2-0-1
   i. Emotional with social reference 2-0-0

II. Motivational (Philosophy of life, decisions, self-evaluation, etc.) 77 (38.5 per cent)-28-59
   a. Vocation and problems relating to it 40-11-19
   b. Dislikes school or unhappy here (Wants to leave school, join the Army or work) 6-7-14
   c. Lack of motivation and interest (lazy, shiftless) 14-4-7
   d. Concern about present status and future 6-4-10
   e. Confused in purpose (lack of stability) 5-1-5
   f. Autism 2-0-3
   g. Religion 2-1-1
   h. Excessive motivation 2-0-0

III. Emotional (Social not predominant) 138 (69 per cent)-34-52
   a. Emotional instability 18-6-7
   b. Nervousness and irritability 15-2-15
   c. Depression, discouragement, moodiness 11-6-9
   d. Worry over personal trait or situation 18-4-4
   e. Physical problems with emotional basis 24-4-1
   f. Worries (past, future, studies, etc.) 11-5-7
   g. Fears (future, diseases, etc.) 9-3-6
   h. Insomnia 8-0-2
   i. Hypertension 11-1-0
   j. Negativism (stubbornness, behavior problem) 8-1-1
   k. Threat of suicide 3-1-0
   l. Impulsive, compulsive acts. Obsessions, etc. (Lack of will power) 2-1-0

IV. Familial (May produce emotion but emphasis on parent) 6 (3 per cent)-13-19
   a. Parental attitudes and actions 5-9-16
   b. Homesickness 0-4-3
   c. Other members of family—attitudes and actions 1-0-0

V. Sexual (Other emotional factors often involved) 25 (12.5 per cent)-17-23
   a. Not adjusted to opposite sex 5-6-11
   b. Sex problems (masturbation, control, etc.) 11-5-2
   c. Romance trouble 7-1-7
   d. Marriage 2-5-3

VI. Disciplinary (Actual or potential) 4 (2 per cent)-3-3

VII. Academic 24 (12 per cent)-19-25
   a. Low grades and study problems (inability to concentrate) 23-15-25
   b. Referred by faculty member 0-4-0
   c. Ability questioned 1-0-0

VIII. Financial 4 (2 per cent)-5-5

IX. Schedule (Various activities) 1 (0.5 per cent)-2-3

X. Health 22 (11 per cent)-4-3

XI. Miscellaneous
   a. No interview 11 (5.5 per cent)-14-0
   b. Interview with friend or relative 3 (1.5 per cent)-4-0
   c. No problem 0-1-0

This classification was devised after grouping all of the individual complaints of over 300 cases. An attempt was made to avoid masking any important complaints by combining symptoms into more inclusive classifications. This list should indicate the specific kind of complaints seen by a clinic of this type and their relative frequency.

The topics of this classification are arranged from the more subjective complaints, for example, Social and Emotional to the more objective as Financial and Health. The difficulties encountered in all attempts to classify qualitative material was experienced in this case namely, overlapping of complaints and the danger of combining complaints

that are qualitatively or superficially similar but essentially unlike.

No assumption is made by the writer as to the validity of the complaints in terms of the real nature of the student's problem. These are merely presented as the student "complaints." Often a student will apply to a clinic with an emphasis upon specific symptoms and after several interviews the symptoms fall into the background and other problems —sometimes of a more serious nature appear. Since most problems are emotional, social, and motivational in some aspects, the major headings must be considered as indicating the predominant element; it does not imply that the other aspects are absent.

The percentages of complaints in the major classifications remain similar in magnitude and rank order for the three groups with several exceptions. The health problems were very important when the clinic first opened because the clinic was novel and the physicians were encouraged to send students with physical complaints on an emotional and social background to the adjustment clinic. In later years the students tended more to refer themselves. All problems, but especially motivational, assumed much greater relative magnitude in the third tabulation group, probably because this group was selected from more complete files which contained the cases of students who were more disturbed or more thoroughly studied. The more *subjective* problems seemed most important. Emotional problems appear first or second in all three tabulations. Motivational or Social problems appear among the first three orders in all tabulations. Academic and Sexual problems are next in importance, assuming fourth or fifth place but clearly less important than the three just mentioned. The least important are the more objective, tangible problems as Schedule, Disciplinary, and Financial.

More consistently frequent specific complaints in the sub-classifications are: Adjustment to fellows, inferiority and lack of confidence, vocational indecision, desire to leave school (especially during the period of national emergency), nervousness and irritability, emotional instability, depression and discouragement, worries (of various kinds), low grades and study problems. The frequency of these sub-problems for the three groups in most cases is similar, but some variation occurs. The variation in one group on vocational problems can be explained in terms of the temporary clinical procedure at that time to discuss these problems in discussion groups rather than in individual conference. Some of the later increases in problem frequencies can be explained by the passage of the Selective Training and Service Act. Other fluctuations seem to be due to chance, classification errors and to the character of the group of cases.

It is interesting that in this age group more students do not consult professional personnel about sex problems. The reasons for the relatively infrequent reference to this problem may be due to the taboos on the subject, the relative objectivity of the problem in that it concerns others and not always one's inner traits alone, and the actual frequency and common occurrence of "love" problems, which may make students free to discuss their problems with friends.

A tabulation was made of the reasons the students were referred by others to the clinic, usually by professional personnel of the University. There were 74 cases of the first 200 who were so referred. The complaints of 55 of these cases, or 74 per cent, were classified as emotional, and of these 28 were worries over a personal trait or a situation. The

other categories were inconspicuously small in frequencies. Emotional problems, particularly those involving other people, seem to be the kind which prompt others to express concern.

Complaints of clinical and non-clinical groups

The complaints of students applying to the adjustment clinic are similar in many ways to those mentioned by an unselected group of 208 students in Applied Psychology class when they were asked to describe their personal problems on a Pre-Interview Blank. Of the unselected group 56 (26.9 per cent) of the problems were social, 45 (21.6 per cent) emotional, 44 (21.1 per cent) motivational, 24 (11.5 per cent) academic, 18 (8.6 per cent) sexual, 13 (6.2 per cent) financial, 4 (1.9 per cent) health, 13 (6.2 per cent) family, 3 (1.4 per cent) schedule, 1 (0.5 per cent) disciplinary. Of this group 12 (5.7 per cent) said "no problem in particular" and 52, (25 per cent) made no answer.

The percentages of problems mentioned by the unselected group falling into the ten major categories are not unlike those of the first two clinical groups in rank order. All clinical groups, however, mention more problems, but this may be due to a more thorough study of the individual. The greatest difference in problems mentioned was in the categories of emotional,[3] health, and sex problems. All clinical groups showed a much greater proportion of these problems. In general, the relatively more complex and subjective problems classified as social, motivational, and emotional were slightly in some cases but consistently greater for the clinical groups.

The specific problems of the unselected group were similar in frequency to those of the clinical group but differed in that the following problems were not as prominent as they were with the clinical group: desire to leave school, nervousness and irritability, emotional instability, depression and discouragement. These results indicate that the problems of the students who apply to an adjustment clinic are not essentially unlike those of the typical student except for the greater emphasis on the *emotional* problems in the case of the former.

These results from the unselected group would indicate that at least around 75 per cent of college students have problems of a psychological nature which vary in seriousness. The results are similar to those reported by other authors. The estimate of one reviewer of the studies of a random sample of college students is that about 85 per cent of them have problems requiring guidance (1). One survey of 3,515 college students revealed that 73 per cent of them had at some time felt the need for advice on personal problems (11).

Other studies of student problems

The nature of the problems of both unselected and less well-adjusted students reported by other authors is highly similar to that reported here. This study of "problems," however, differs from most earlier reports in that it has as its basis the complaints taken from clinical notes and free descriptions by unselected students of their personal problems. It differs from the questionnaire and inventory approach in being less interrogative but also in being less suggestive, more dynamic, more realistic, and less atomistic in emphasis.

Investigations vary as to rank order of academic and personal or social prob-

[3] The only difference that was statistically significant was the difference between percentages mentioning emotional problems. The difference between the unselected group and the first clinical group (N=200) was 10.8; between the unselected group and the second clinical group (N=100) was 2.78.

lems [6, 11, 16, 25]. This investigation agrees with many studies in placing personal and social problems above academic. No doubt these differences in rank order are influenced by the unintentional emphasis in the investigator's approach and classification. Surely a teacher in a college who devises a questionnaire including many items which deal with study problems will find academic problems looming important. A similar distortion however, may occur when a psychologist interested in emotional problems classifies college students' problems.

In addition to the *type of questionnaire and investigator, the nature of the student body and the period of year* influence the results. Economic problems were important around 1932 in a state college, and unimportant in a private girls' college in 1941 [10, 16]. Religious problems are low on most lists, but high on a list compiled from a small religious college [8]. Despite these variations there are certain trends which hold for most studies of problems. Personal and social problems and academic problems are almost invariably high in order; health, schedule, and home problems tend not to be high in frequency. Vocational problems are not insignificant and tend more often to be high on the list or toward the middle. There is a suggestion, although not unequivocal in all these data that the more subjective, personal and complex problems are more important and higher in the rank order list than the more objective problems which involve environmental situations [3, 5]. One reason why the results are not more unequivocal is because most problems are both subjective and objective. It is very difficult to estimate the degree to which a specific problem is subjective without knowing the individual case.

Complexity of problems

One approach to the question as to whether a given student has several rather than a single "problem" may be attacked by tabulating the number of complaints in each statement of symptoms made by the subject. Each different symptom may be considered a distinct complaint no matter how similar it may be to a successively mentioned symptom. It is rare that a second complaint made by the student in describing symptoms is synonymous to another made by him. From this standpoint, the above discussed complaints of the three groups of 200, 100, and 100 students produced the following results: From 31 per cent to 40 per cent of the students had one problem, depending upon the group considered; 27.5 per cent to 32 per cent had two complaints, 15 per cent to 23 per cent had three problems, and 3 per cent to 11 per cent had four problems. It is interesting to note that almost two-thirds of all the students considered had more than one "problem" and about a third of all the students had more than two "problems" in a complaint. This corroborates the findings of studies on younger subjects that problems usually do not occur alone but occur in groups [14].

The various complaints or symptoms mentioned by a given individual are not necessarily similar, although they may be related through the inner organization of the individual's personality. A review of the eleven groups of individuals' symptoms reported previously illustrates this generalization.

SUMMARY

A psychological clinic established at the University of Missouri as a part of a Student Health Service with strictly confidential case records, and introduced to incoming students through a

brief test-interpretation program resulted in a relatively large self-referment. The problems presented by the students may be classified as primarily emotional, motivational, social, familial, academic, sexual, schedule, disciplinary, financial, and health, in this order of frequency. These problems are not essentially unlike the problems of an unselected student group except that emotional problems were more frequent in the clinical group. Students usually are troubled by multiple rather than single problems.

References

1. Anderson, V. V. *Psychiatry in Education.* New York: Harper. 1932. Ch. I. p. 25-26.
2. Anthonisen, M. R. "Annual Report of Consultant in Mental Hygiene, 1937-38," Wellesley College, Massachusetts. (Typewritten copy from author.)
3. Blanton, S. "A Mental Hygiene Program for Colleges," *Mental Hygiene*, 1925, 9: 478-88.
4. Boynton, R. E. *Biennial Report of Student Health Service.* University of Minnesota, 1941, p. 4; 1943, p. 5.
5. Bragdon, H. D. *Counseling the College Student.* Cambridge, Mass.: Harvard University Press. 1929, 80-81, 102-103.
6. Congdon, N. A. "The Perplexities of College Freshmen," *Educational and Psychological Measurement*, 1943, 3: 367-75.
7. Diehl, H. S. *Biennial Report of Student Health Service.* University of Minnesota, 1930, pp. 410-411; 1932, pp. 2-3; 1935, pp. 4-5; 1937, p. 297.
8. Emme, E. *The Adjustment Problems of College Freshmen.* Cokesbury Press. 1933, pp. 125.
9. Fry, C. C. and Rostow, E. G. *Mental Health in College.* New York: The Commonwealth Fund, 1942, pp. 365.
10. Hartman, G. W. "The Classification of Adjustment Problems Among College Students," *Journal of Abnormal and Social Psychology*, 1933, 28: 64-69.
11. Katz, D., and Allport, F. H. *Student Attitudes.* Craftsman Press, 1931, p. 88.
12. Kerns, H. N. "Experiences of a Mental Hygienist in a University." *Mental Hygiene*, 1927, 11: 489-495.
13. Lloyd-Jones, Esther. "Variations in College Personnel," JOURNAL OF CONSULTING PSYCHOLOGY, 1940, 4: 201-205.
14. Louttit, C. M. *Clinical Psychology.* New York: Harper, 1936, pp. 259-260.
15. McKinney, F. *Psychology of Personal Adjustment.* New York: Wiley, 1941, pp. 553-63; 565-67.
16. Marsh, C. J. "The Worries of the College Woman," *Journal of Social Psychology*, 1942, 15: 335-39.
17. Morrison, A. W. "A Further Discussion of College Mental Hygiene," *Mental Hygiene*, 1928, 12: 48-54.
18. O'Shea, H. E. "The Women's Personnel Service," *Bulletin of Purdue University*, 1934-35, pp. 132-134; 1935-36, pp. 142-48; 1936-37, pp. 147-150.
19. Palmer, H. D. and Harper, E. O. "College Mental Hygiene Methods," *Mental Hygiene*, 1937, 21: 397-415.
20. Raphael, T., Gordon, M. A., and Dawson, E. M. "Mental Hygiene in American Colleges and Universities," *Mental Hygiene*, 1938, 22: 221-36.
21. Raphael, T. "Four Years of Student Mental Hygiene Work at the University of Michigan," *Mental Hygiene*, 1936, 20: 218-31.
22. Smith, S. K. "Practical Modes of Treatment in Handling Mental Hygiene Problems in a University," *American Journal of Psychiatry*, 1932, 13: 57-67.
23. Stogdill, E. L. "A Survey of the Case Records of a Student Psychological Consultation Service Over a Ten-Year Period," *Psychological Exchange*, 1934, 3: 129-33.
24. ———. "Techniques of Student Counseling," JOURNAL OF CONSULTING PSYCHOLOGY, 1940, 4: 176-180.
25. Strang, R. *Behavior and Background of Students in College and Secondary Schools.* New York: Harper, 1937, Ch. 1.

FOUR YEARS OF A COLLEGE ADJUSTMENT CLINIC[1]

II. CHARACTERISTICS OF COUNSELEES

BY FRED McKINNEY
UNIVERSITY OF MISSOURI

IN A PREVIOUS paper the organization of the clinic and the nature of the problems of the counselee were presented [5]. This study compares some of the more readily obtainable characteristics of the students referred to the clinic with the total student body, and relates these findings to those published by other college clinicians.

The following data arise from two groups of students applying to the college adjustment clinic of a Student Health Service previously described [5]. The first group consisted of the first 200 consecutive applicants and the second group consisted of 100 consecutive cases taken from the files three years later.

COLLEGE REGISTRATION WITHIN THE UNIVERSITY

The first 200 cases had the following distribution: 48 per cent in the Arts college, 10.5 per cent in Agriculture, 8 per cent in Journalism, 7.5 per cent in Business and Public Administration, 6.5 per cent in Graduate school, 4.5 per cent in Engineering, 3.5 per cent in Education, 1 per cent in Law, and 1.5 per cent in Medicine; 9 per cent did not give their school. The percentages of students registered in the various colleges during the same time (1938-39) were: 38 per cent in Arts and Science, 18 per cent in Agriculture, 11 per cent in Graduate school, 9 per cent in Engineering, 7 per cent in Journalism, 7 per cent in Education, 6 per cent in Business and Public Administration, 3 per cent in Law, and 1 per cent in Medicine.

For the other 100 cases from a later period, 51 per cent were in Arts and Science, 10 per cent in Engineering, 15 per cent in Agriculture, 6 per cent in Journalism, 6 per cent in Education, 2 per cent in Business and Public Administration, 1 per cent in Nursing (Medicine), 5 per cent in Graduate School, and 4 per cent registered as Special. The percentages in these colleges from the student body as a whole were approximately the same as for 1938-39.

None of these percentages except those for the Arts and Science seems to deviate enough from the distribution of the total university population to merit comment. Those for Arts and Science are not significantly higher than we should expect by chance. These findings are similar to those published from a clinic in another larger midwestern university [8].

SIZE OF HOME TOWN

Of the first 200 students applying at the clinic, 24 per cent came from settlements with population below 2,500, 11.5 per cent from towns of from 2,500 to 10,000, 10 per cent from cities between 10,000 and 100,000, 7 per cent from cities between 100,000 and 500,000, and 35 per cent from cities above 500,000. Twelve and one half per cent did not report their home town.

Of the second 100 students applying

[1] Clerical assistance in the preparation of this article was provided by the University Research Council, University of Missouri.

at a period beginning two years after the clinic opened, 13 per cent came from towns with populations below 2,500, 8 per cent from towns between 2,500 and 10,000, 24 per cent from cities between 10,000 and 100,000, 4 per cent from cities between 100,000 and 500,000, and 37 per cent from cities above 500,000. Fourteen per cent did not report their home town.

In order to compare the distribution of counselees in terms of size of home town with that of a random sample of the university population, 100 names were chosen at random from the entire range of the alphabet in the student directory and the distribution of these students in terms of the size of their home towns was ascertained. Of these students selected at random, 31 per cent came from settlements with population below 2,500, 27 per cent from towns between 2,500 and 10,000, 15 per cent from cities between 10,000 and 100,000, 13 per cent from cities between 100,000 and 500,000, and 14 per cent from cities above 500,000.

There was a reliably greater number of students from cities with a population above 500,000 coming into the clinic as compared with the random group (Critical ratio 3.12). There was a smaller number of students from these population groups applying to the clinic: cities below 2,500 in population (Critical ratio 2.8) and cities between 2,500 and 10,000 in population (Critical ratio 3.09). It may be that size of home town may be related to emotional adjustment or factors of selection may be responsible for the difference. A later study comparing the problem group and the unselected group may shed light on this question. It is possible that students from certain population groups consult professional advisers more readily.

YEAR IN COLLEGE

Twenty-five per cent of the first 200 students entering the clinic were freshmen and 25 per cent sophomores. The remaining 50 per cent were distributed as follows: juniors 20 per cent, seniors 14 per cent, graduate 6 per cent, unknown, non-student and special student 10 per cent. The second group of 100 students selected for study from a later year contained 45 per cent freshmen, 19 per cent sophomores, and the remaining 36 per cent were distributed as follows: Juniors 14 per cent, seniors 11 per cent, graduate 6 per cent, and unknown 5 per cent. The change can probably be explained in terms of the effectiveness of the personality test interpretation program in bringing into the clinic a greater number of underclassman students.

These percentages of the entire student body falling in various years are for 1938-39: freshman 23 per cent, sophomore 19 per cent, junior 23 per cent and senior 22 per cent; the remainder are graduate and special students. For 1940-41 the percentages are: freshmen 25 per cent, sophomore 22 per cent, junior 22 per cent and senior 18 per cent; the remainder graduate and special students.

Comparing the percentages of students of various classes who apply to the clinic with the number in college we see that there is a *tendency for more freshmen and fewer seniors to apply* than their proportion in the university after the clinic had been established and when there were more voluntary student referrals.[2] The distribution of students applying to the clinic in terms of class in college is similar to that reported by clinicians at other schools [6, 7, 8].

AGE

Age, like class in college, reflects to

[2] This tendency is statistically significant. (Critical ratio for freshmen 4.00, for seniors 4.4).

some extent the developmental status of the individual. The age range of the students applying to the clinic is from 17 to 48, about the age range of the entire university population. Of the first 200 cases, 5 per cent were 17 years of age; 11.5 per cent 18 years; 18.5 per cent 19 years; 17.5 per cent 20 years; 11 per cent 21 years; 10.5 per cent 22 years; 3 per cent 23 years; 13.5 per cent between 24 and 48 years and 9.5 per cent age not given. Thirty-five per cent were from 17 to 19 years of age and 74 per cent between 17 and 22 years.

The second group of 100 of a later period in the clinic's history was roughly similar: 10 per cent were 17 years of age or below; 22 per cent 18 years; 20 per cent 19 years; 18 per cent 20 years; 6 per cent 21 years; 8 per cent 22 years; 8 per cent from 24 to 48 years, and 8 per cent, age not given. Fifty-two per cent were from 17 to 19 years of age and 84 per cent were from 17 to 22 years.

These data similar to those on class in college, show that among the students who refer themselves in greater number to the clinic there tend to be more younger students.

SEX

Of the first 200 cases, 59 per cent were men and 41 per cent women. The percentage of the two sexes registered in the university at that time was 75 per cent men and 25 per cent women. The second 100 cases recorded two years later consisted of 65 per cent men and 35 per cent women. The percentage of each sex registered in the university at that time was 74 per cent and 26 per cent respectively. There is a *tendency for the clinic to see more women* than one would expect by their distribution in the university population.[3] This differs from the situation reported at one other large midwestern university at which the proportion of men and women applying at the clinic is similar to their proportion in the university [2].

[3] The tendency during the first year was definitely reliable—a critical ratio of 5.11, for the second period a critical ratio of 1.81.

MEMBERSHIP IN FRATERNITY AND SORORITY

Of the first 200 cases coming to the clinic, 18 per cent said they belonged to a fraternity or sorority. Of the later 100 cases 30 per cent were members. Of the school population in 1938-39 and 1941-42, 26 per cent of the men belonged to fraternities and 34 per cent of women belonged to sororities. During the later period when the clinic had established itself and there were more voluntary referrals there was about the same percentage of fraternity students coming to the clinic as the proportion in the university. Similar results are reported in another university [7].

NUMBER OF INTERVIEWS PER STUDENT

Of the first 200 students applying to the clinic, the range of interviews per student was from 1 to 16. Twenty-nine per cent had one interview, 21.5 per cent had two, 21.5 per cent had three, 9 per cent had four, 4.5 per cent had five, 7.5 per cent had over five interviews, and 7 per cent were not interviewed but the cases were presented by others.

Of the later 100 cases, the range was 1 to 15 interviews per student. Forty-four per cent had one interview, 28 per cent had two, 7 per cent had three, 8 per cent had four, 7 per cent had five, and 6 per cent had over five interviews.

During the development of the clinic there seemed to be a tendency to move toward a greater number of single interviews. It may have been due to the pressure caused by greater number of students applying to the clinic as the clinic grew or it may be that more students with less serious problems applied

after the clinic became better established.

Two other clinics which have published data on this matter show these similar trends: A greater number of single interviews than any other combination of numbers, and numerous two-, three-, and four-contact cases. The data here differ from those of two other clinics in showing less difference in frequency between the one-contact and two-contact cases, and differ from all other clinics in showing a smaller range in number of contacts.

CLASSIFICATION OF COUNSELEES IN TERMS OF KIND AND SERIOUSNESS OF DISTURBANCES

It was possible to make only a tentative classification of the students who came into the clinic because frequently full case material was not available and the limited staff afforded few opportunities for psychiatric verification and corroboration concerning the basic nature of the individual's personality. None of these classifications was a matter of record. They were kept on a confidential card and were listed usually within six months of the original referral.

The student was designated *normal* if he did not reveal any strong emotional conflict or if there were no evidences of clinical trends which might lead to later disturbances. They were exceptionally stable individuals. Of the first group of 200 students 16.5 per cent were classified as normal; of the second group (N=100) 10 per cent were normal. Those who showed no clinical trends in personality patterns but who exhibited strong emotional conflicts were designated as *conflict group*. Of the first 200 cases, 30.5 per cent were in this group and 35 per cent of the second 100 cases. Some students applying to the clinic showed evidence of psychoneurotic patterns in their personality structure. Most of the individuals did not appear to be severely neurotic. Of the first group (N=200) 42.5 per cent and of the second group (N=100) 25 per cent had some psychoneurotic traits. Very few of these were severely neurotic. Of those showing prepsychotic trends in personality, the first group of 200 had 1 per cent, the second group of 100 had 5 per cent. None of the first group was diagnosed psychiatrically as psychotic, but 2 per cent of the second group were referred to an off-campus psychiatrist and diagnosed as psychotic. When it seemed hazardous to venture a classification because of insufficient information, students were not classified. Of the first group of 200, 1.5 per cent were so treated, but later when more single contacts were made by the clinic, 25 per cent fell in this group.

Psychiatrists in adjustment clinics probably differ somewhat in their standards of classification. In one large university clinic serving 448 students in one year, 5 cases were found to have clear-cut psychoses [3]; in another, of 1,000 cases seen 74 or 7.4 per cent were psychotic [9]; in another university 2.6 per cent were psychotic [8]. Likewise, in the first clinic 12 cases were mentioned as severely neurotic; in the second 21.5 per cent psychoneurotic, and in the third 38.3 per cent. Another writer combines psychoses and more serious psychoneuroses and finds 8 per cent of his entire counselees in this group [4]. The general findings of all of these clinics are similar to the above, namely that most of the cases involve personality adjustment and are not significantly clinical in nature.

Psychoneurotic inventory scores

The average psychoneurotic inventory scores (using 42 most diagnostic items of the Thurstone Personality Schedule) for the two groups of coun-

selees are 17.5 (N=200) and 16.7 (N=100). The average score for the incoming students for 1938-39 was 15.4, for 1941-42, 15.3.

In terms of the first group of 200 cases, the psychoneurotic scores separate the clinical group from the incoming students even though there are normal cases included in the clinical[4] group. The separation is not clear in the case of the second group of 100 cases.[5] When the normal group is separated from other counselees there is a clear-cut separation between groups of students with conflicts and psychoneurotic trends and unselected incoming students in inventory scores.[6]

Ability and academic achievement

The average college aptitude percentile on the Ohio Psychological Test as reported by the first group of students who applied to the clinic (N=200) is 71.7; for the second group of 100 it is 69.4. The average for the students who enter the University of Missouri is 73. It would seem then, from the evidence available, that the ability of the students who apply to the clinic is roughly similar to the student body as a whole.

A more thorough study needs to be made on student grades before applying to clinic, during the consultation period, and at some time after clinical contact has been terminated or relaxed.

SUMMARY

The students who apply to this college adjustment clinic of the Student Health Service are more often the younger ones, many of whom are freshmen, are slightly more frequently women, are both fraternity and non-fraternity, are from all colleges in the university in a representative proportion, are more frequently from cities of populations above 500,000, and less frequently from smaller cities and villages. Most students have only one interview but the range in number of interviews extends up to 15 a year. The largest percentages of students are troubled with emotional conflicts or psychoneurotic personality trends; severe mental illness or personality disturbance is rare. The students who apply at the clinic differ from unselected students in scores on a short psychoneurotic inventory. From the evidence available, these students seem to be similar to the general student body in college aptitude.

[4] Critical ratio is 2.95.
[5] Critical ratio is 1.69.
[6] Critical ratios vary in an unpublished study from 2.31 for individuals with hysterical trends to 10.6 for individuals with psychasthenic trends.

REFERENCES

1. Anthonisen, M. R. "Annual Report of Consultant in Mental Hygiene, 1937-38," Wellesley College, Massachusetts. (Typewritten copy from author.)
2. Boynton, R. E. *Biennial Report of Student Health Service.* University of Minnesota, 1941, p. 4; 1943, p. 5.
3. Diehl, H. S. *Biennial Report of Student Health Service.* University of Minneosta, 1930, pp. 410-11; 1932, pp. 2-3; 1935, pp. 4-5; 1937, p. 297.
4. Fry, C. C. and Rostow, E. G. *Mental Health in College.* New York: The Commonwealth Fund, 1942, pp. 365.
5. McKinney, F. "Four Years of a College Adjustment Clinic. I. Organization of Clinic, and Problems of Counselees," JOURNAL OF CONSULTING PSYCHOLOGY, 1945, 5: pp. 203-12.
6. O'Shea, H. E. "The Women's Personnel Service," *Bulletin of Purdue University,* 1934-35, pp. 132-34; 1935-36, pp. 142-48; 1936-37, pp. 147-50.
7. Palmer, H. D. and Harper, E. O. "College Mental Hygiene Methods," *Mental Hygiene,* 1937, 21: 397-415.
8. Raphael, T. "Four Years of Student Mental Hygiene Work at the University of Michigan," *Mental Hygiene,* 1936, 20: 218-31.
9. Smith, S. K. "Practical Modes of Treatment in Handling Mental Hygiene Problems in a University," *American Journal of Psychiatry,* 1932, 13: 57-67.

SOME CONTRIBUTIONS OF NON-DIRECTIVE METHODS TO COLLEGE COUNSELING

By ARTHUR W. COMBS
SYRACUSE UNIVERSITY

THE PROBLEMS of the returning veteran, the war time problems of civilian life, and the general attitudes of uncertainty and apprehension with respect to the future have resulted in vastly increased burdens on the college counselor. At the same time, college counseling has come to be accepted by students and administrators alike as an integral part of college service and is increasingly called upon to render assistance to troubled individuals. Techniques of counseling, however, have not kept pace with these developments and many college counselors faced with these increasing demands and growing confidence in counseling on the part of the public have come to examine their techniques with certain misgivings. Many have been deeply disturbed at failures in established techniques and philosophies to perform the tasks so trustingly assigned to their profession.

While non-directive counseling is by no means a panacea for all the ills of counseling, it does have significant contributions to make in dealing with problems of personal, social, and emotional adjustment. It is the purpose of this paper to report upon some contributions of non-directive methods to the philosophy and to the practices of college counseling.

Emphasis upon the individual

One of the outstanding contributions of non-directive counseling appears to be its redirection of emphasis from the environment to the individual. Psychology has succeeded in devising a large number of techniques for effective environmental treatment, but, unfortunately, has not been so successful in finding ways of effectively changing the attitudes, habits, feelings, and emotional patterns of the individual. Often it is these very patterns which are most vital in bringing about the adjustment of the client. Psychology is still a long way from a clear picture of the dynamics of these emotional and habit processes. As a result, college counselors have been largely forced to rely upon environmental therapy where techniques are established and where the counselor feels he is on firmer ground. But, in dealing with individuals it is impossible to effectively control environment for any considerable length of time and sooner or later the individual must take command of his own fate and make his own way.

It is clear that the real objectives of adjustment counseling must aim eventually toward making the individual better able to cope with his environment no matter what it may be. When the counselor no longer holds control of the environmental situation, the client must be more capable of dealing with his own situation if his experience with counseling is to be truly effective. In other words, good counseling must result in personal growth in the client — growth

toward more effective and independent self direction. It is this sort of growth which non-directive methods seek to foster.

Consistent with objectives of education

It will be recognized that this "growth toward effective, independent self-direction" is actually a major objective of higher education. Furthermore, a democratic society is said to believe in the integrity of the individual and his ability to arrive at his own conclusions providing he is given the opportunity. It is inconceivable that counseling should work at cross purposes with the society and institutions within whose framework it operates. Yet, paternalistic directive counseling often violates these basic tenets. Too often the counselor has assumed an all-powerful role in college counseling. He has frequently assumed the responsibility for directing the lives of others with an ease and abandon that is awe inspiring to say the least. The measure of his wisdom and experience sometimes reminds one of the slogan for a famous paint—"it covers the earth."

The most dangerous aspect of such procedure, however, lies in the effect it is likely to have on the individual in need. Instead of fostering growth and self-direction, it is often likely to result in habits of dependence upon outside assistance and feelings of inadequacy in the client. Instead of inducing growth toward self determination directive treatment sometimes departs from the very objectives of the institutions in which it operates to produce the opposite result. It seems likely that the philosophy of non-directive therapy may offer some solution to this dilemma.

Utilization of individual drive

Biological science has demonstrated repeatedly the immense regenerative powers of the organism. The field of medicine has come to lean heavily upon these powers and bases its therapy upon an attempt to remove obstacles from the path of recovery, relying upon the patient's own regenerative powers to accomplish the rest. Given a reasonable chance, the organism has tremendous drives toward a healthy condition. For some reason we have too often overlooked this fundamental principle in psychology. Sometimes college counselors have been so intent upon "adjusting" the individual that they have interposed blocks in his path and hindered his progress toward self-adjustment. Non-directive counseling attempts to utilize these drives toward health by encouraging the individual through free expression to find his way to the goals best suited to him.

The counselor using this method cannot help but be impressed by the frequency with which he observes his client torn between conflicting desires finally coming to choose his own best solutions to his problems on his own initiative. Often this occurs even when the choice of action may be very painful and necessitates giving up extremely comfortable habits of behavior. The following example is typical:

Miss Allen, a senior in a very difficult course, came to a college counselor in an extremely disturbed state with a very pronounced tic which her physician had diagnosed as chorea. Her struggle is revealing of some of the dynamics of so called "nervous breakdown."

To the counselor, she says: "I'm going to fail. I just know it. But I can't do that. My family never fails. I run around in a panic all the time. Other people don't seem to care if they fail but I do—I just can't fail. It's frightening. I don't know which way to turn."

In a later interview she states: "I could get out of this by taking incompletes. But I don't want to. I'd be behind the rest of the kids. People can be

so ruthless and I'd have to make it up anyhow—I could go somewhere else to school—but it wouldn't be any better there."

Still later, she says: "I miss my parents so. I suppose I could get sick. But if I did that I'd still have to make my work up. If I get through this, I can get through anything. It's the most difficult thing I have ever coped with."

Miss Allen, after coming to accept herself as an average rather than a brilliant student, finally chose to stick it out. At the end of the semester her grades were 3 A's and a B. Interestingly enough, in addition to this, her "chorea" had disappeared.

Emphasis upon emotional aspects of behavior

A further general contribution of non-directive methods lies in its emphasis upon the feelings and emotional needs of the individual.

It is increasingly clear that if fundamental changes in behavior are to be effected, treatment must be in terms of the basic motivations of the individual. Since these basic drives are largely emotional or attitudinal forces, effective adjustment counseling must find ways of dealing with them. There is hardly a counselor alive who has not often heard his client say: "I know just what I should do—but I can't do it." Without emotional acceptance the degree of real adjustment is highly questionable. It is also apparent that there is a wide difference between intellectual understanding and emotional acceptance. The following statements illustrate from case records how well this fact is understood by the client himself:

They say when you know your faults and attack them—why, you soon get over them. I've tried that for years but it's no good. It sounds good in the books you read and the lectures you hear—but it doesn't work out when you try to put it in practice. You don't really change that way. It's only outside. You can't force a person to change. It just makes a worse conflict and that's all that remains—just the conflict.

From another record:

People keep telling me I'm silly to feel so bad. They tell me not to try to hide it but I can't—Telling doesn't help.

Another student says:

Once Miss Jones gave me an article to read. She had the idea I was superhuman—all I had to do was read an article and do something wonderful—you can't do that!

Despite the advances of modern civilization, human beings are still largely creatures of emotion. The treatment of emotional problems has always been the weakest phase of college counseling. Although non-directive technique is not the final answer, it has placed in the hands of the adjustment counselor a technique whose possibilities we are only beginning to explore.

Useful in college cases

In discussing non-directive methods, Dr. Rogers[1] has indicated some of the primary criteria for its effective use. He points out that conditions are most favorable to success with non-directive techniques when the individual is:

1. Under tension.
2. In some degree of control of his situation.
3. Reasonably independent of close family control.
4. Above dull-normal in intelligence.
5. Roughly between the ages of 10 and 60.

So large a percentage of college cases fall within these criteria that non-directive counseling appears almost tailor-

[1] Carl R. Rogers. *Counseling and Psychotherapy.* Boston: Houghton-Mifflin, 1941. Pp. 70-72.

made for the college group. It has been used successfully in campus work for a wide variety of problems from extremely mild conflict over a choice of couress to complicated problems of severe neuroses. It seems likely that it may be profitably employed in college counseling in situations in which the client is under tension and desirous of help.

The method seems particularly pertinent to the very pressing question of how to deal with the problems of the returning veteran. With this group, problems of adjustment are often severe and likely to be accompanied by resentment at regimentation and direction. As one veteran put it:

> Everyone around here treats me like a kid. They want to tell me what to do. I've had enough of that for a lifetime. I guess I grew up fast in the Army. I've got to work this out for myself.

It is in such cases where self orientation to personal, social, and emotional problems is indicated that non-directive counseling makes its greatest contribution.

Student reaction to non-directive methods

To the client, non-directive counseling is likely to be a completely unique experience. It is seldom in the everyday world that the average person finds himself completely free to express his every thought as he likes. More often than not, the man who desires to talk of his troubles finds his listener anxious to tell of his own, or, even worse, to convince the troubled person that his worries are purely imaginary. It is not suprising then to find that student reaction to non-directive counseling is enthusiastic. Furthermore, antagonism and resistance are avoided as the client comes to feel that in this situation there is no violation of his own integrity. He feels understood and accepted as he has probably never been before.

By avoiding antagonism and resistance the non-directive method speeds counseling immeasurably. Rarely does it exceed fifteen interviews and more often than not in college work terminates in five, four, and even less contacts. Experience has also shown that although the client has excellent rapport with the counselor, it is very seldom that he returns for further extensive counseling.

Results of counseling

One of the most interesting aspects of non-directive techniques is the assurance with which the client states his change of condition. At the close of counseling, statements of certainty as to the permanence of adjustment are so common as to be almost a part of the regular pattern of interviews. The following are typical comments of this sort from closing interviews picked at random from case fiiles.

From a returned veteran:

> I feel awfully good compared to a few months ago. I don't think I'll ever get as moody as I was then. I'm over most of the rough spots.

From a rejecting mother:

> I think we're about finished. I think that undoubtedly I'll have some more difficulties from time to time but I feel that I'll be much better able to handle them. I don't think I'll ever be in such a mess as I have been.

From a male student:

> I really think I'm all through. I don't think I'm kidding myself. I'm up to stay.

From a female student:

> I'm a new woman. My whole life is changed from inside out. I've got my problems solved. I know what I want and I know how to get it.

Such statements indicate the feeling of permanence which the client possesses at the close of successful interviews and his obvious satisfaction in a new adjustment.

Objective evidence of results of counseling

Counselors utilizing non-directive techniques have rather generally been deeply impressed with the results they have been able to obtain. It is an exciting experience to observe the client as he moves toward new decisions and new adjustments, particularly so since the climax of some cases is highly dramatic. It is clearly recognized, however, that faith in a method is by no means a substitute for objective evidence.

Non-directive counseling is fairly new. A great proportion of the time of those interested in the method has thus far been devoted to the study and improvement of techniques. Research is now under way attempting to compile follow-up data and it is hoped that more objective evidence will soon be forthcoming.

In the absence of such data, the following cases may be cited as indicating in some some degree the kind of results obtained with non-directive methods.

The first is the case of a young man discharged from the Navy as psychoneurotic. He came to a college campus under the G. I. Bill to study business administration. He was soon referred for counseling aid by his gymnasium instructor who described him as 'the weakest thing I ever saw." The administration, impressed by his 2-percentile college aptitude score and failing midterm grades, forecast his probable early departure. When he appeared for counseling, he was obviously greatly disturbed and told of failing in three of his subjects and getting a *D* in another. His Physical-Fitness-Index was below the 25 percentile. Six weeks later, at the close of counseling and the end of the semester, he was requested to repeat his physical fitness and college aptitude tests. At that time his grades showed two *C*'s, two *B*'s and an *A*. His college aptitude score had risen 16 percentile points, but most amazing of all, his physical fitness score had risen from the 25th to the 75th percentile, despite the fact that no gymnastics were required of him beyond the simple program of his classmates.

The second case is that of a young woman extremely afraid of her father and desirous of attaining independence from his domination. During the course of counseling she succeeded in gaining this freedom through her own efforts. Bernreuter results obtained just prior to counseling show wide deviation from average in all categories except "sociability" with particularly wide deviations in high "neurotic tendency," low "self sufficiency," high "introversion," low "dominance" and extremely high lack of "confidence in self."

One year after the conclusion of counseling the Bernreuter was administered again. At that time it showed no disturbingly high categories whatsoever. In fact, an average change of 33 percentile points was observed in all categories and all in a positive direction.[2]

Other cases now under study show similar interesting changes. While these cases are by no stretch of the imagination conclusive, they are highly suggestive of what may often be accomplished.

Need for treatment emphasis

The enthusiasm for ability testing, case history techniques, and diagnostic methods which has characterized psy-

[2] A. W. Combs, "Followup of a Counseling Case Treated By the Non-Directive Method," *Journal of Clinical Psychology*, 1945, 1: 147-54.

chology since the last war has by no means been an unmixed blessing. It has often led the counselor to an unfortunate preoccupation with diagnosis to the exclusion of therapy. It is still not uncommon to find the counselor devoting hours to testing and diagnosis and minutes to the treatment of the individual. It is further noteworthy that even in clinical psychology the number of psychological clinics offering any appreciable amount of individual treatment is appallingly small.

Wrapped in the scientific and statistical study of individuals, the psychologist has too often become so involved in trying to understand the nature of people that he has overlooked his equally important responsibility of contributing to the welfare of those individuals. The development and utilization of treatment methods has been too long delayed in clinical psychology. Non-directive therapy is performing a real service in directing attention to the problems of treatment and if present indications of its effectiveness are characteristic, it may prove to be the most significant contribution to counseling in years.

THE VALIDITY OF THE AMPLIFIED MULTIPLE CHOICE RORSCHACH AS A SCREENING DEVICE

BY RACHEL F. MALAMUD AND DANIEL I. MALAMUD
NORWICH STATE HOSPITAL

THE AMPLIFIED Multiple Choice Rorschach, devised by Harrower-Erickson [4] in the light of results obtained with her original Multiple Choice Test, embodies a number of modifications in form and scoring procedure. A number of investigations [2, 3, 5, 7] have indicated that with the scoring method recommended by Harrower-Erickson the original Multiple Choice Test does not discriminate sufficiently to be very useful as a screening test. Does the amplified form of the test represent a substantial improvement? Has the test's screening efficiency been appreciably raised by the newly introduced modifications?

In the amplified version of the Multiple Choice Rorschach 30 rather than 10 choices are offered the subject for each of the 10 Rorschach cards. He is asked to underline three choices for each inkblot, one from each of three groups. The subject may check as many additional responses as he wishes. No provision is made for writing in alternate responses. Good responses are classified under the categories identified by numbers 1 to 5, while poor answers are assigned the category numbers 6 to 10. Good answers are not weighted. Poor answers 6 and 7 are given a weight of one half each; poor answers 8 and 9 a weight of one; poor answers 10, the "Nothing at all" responses, a weight of two. These weights are apparently based upon analyses of the frequencies with which each type of poor answer in the original test was chosen by normals and abnormals. The total number of good and poor answers are recorded for first choices and additional choices separately. Harrower-Erickson suggests calculating three scores: (1) the percentage of poor answers for the record as a whole (first plus additional choices), (2) the percentage of poor answers in the 30 required choices, and (3) the percentage of poor answers in the additional choices. When the first percentage is 60 per cent or over, she suggests that the record be screened out. Records whose first percentage is between 40 per cent and 60 per cent are considered to be borderline. In these cases the richness or meagreness of the record is considered. According to Harrower-Erickson, " . . . the individual who gives several additional answers to each card, and whose total number of responses is therefore over 50, is probably less disturbed, even with the *same percentage* of poor answers, than the individual whose total number of responses is 30 or less."

Harrower-Erickson gives no results obtained with the amplified Multiple Choice Rorschach. In the only published study to date, Balinsky [1] found that the test was not adequate for screening out of a group of apparently normal applicants those individuals of questionable employability. A more crucial question remains unanswered: Does the amplified form of the test discriminate satisfactorily between normals and ob-

viously disturbed psychiatric patients?

PROCEDURE

The amplified Multiple Choice Rorschach was administered individually to 100 psychiatric patients, most of whom were psychotics, and 100 normals. The patient group consisted of new admissions and patients from semi-disturbed wards. There were 36 males and 64 females, including 54 schizophrenics, 12 alcoholic psychoses, 10 organic psychoses, 6 manic-depressives, 5 psychopathic personalities without psychosis, and 13 miscellaneous psychiatric conditions. The median age was 34 and the median educational level was eight years of schooling.

The 100 normals consisted of 34 males and 66 females, including 80 hospital employees, 11 student nurses, and 9 normal applicants for employment used in the study by Balinsky.[1] The median age was 26 and the median educational level was 11 years of schooling.

No attempt was made to match normals and abnormals. It was felt that the test, if valid, would separate most normals from most psychiatric patients regardless of their age, sex or education.

RESULTS

The 100 normal and 100 abnormal records, when scored for the percentage of poor answers for the record as a whole, show almost complete overlapping of scores. The normals' mean score is 40.15, S.D., 29.65. The abnormals' mean score is 46.30, S.D., 34.35. The difference between these group means is unreliable, the critical ratio being 1.35. At least as many normals (21 per cent) as abnormals (18 per cent) obtain scores at or above the critical score of 60 per cent. The score of 40 per cent recommended for screening out borderline cases identifies 47 per cent of the abnormals and misplaces 38 per cent of the normals. Of the 17 normals and the 29 abnormals who obtain scores between 40 per cent and 60 per cent, only 6 per cent of the normals give "rich" records (over 50 responses) in comparison to 21 per cent of the abnormals. Even by using the maximally discriminating score of 32 per cent, only 67 per cent of the abnormals are identified, while 48 per cent of the normals are misplaced. Using an essentially similar scoring procedure with the original Multiple Choice Rorschach, Challman [2] obtained better results. He correctly identified 69 per cent of state hospital patients, misplacing only 23 per cent of normals.

Using the two other scoring systems suggested did not improve the discrimination. When the 200 records were scored for the percentage of poor answers in the thirty required choices alone, the maximally discriminating score of 28 per cent correctly identifies 69 per cent of the abnormals and misplaces 53 per cent of the normals. When the percentages of poor answers in the additional choices alone were computed, 54 out of 69 abnormals (or 78 per cent) and 31 out of 56 normals (or 55 per cent) score at or above the critical score of 20 per cent.

POSSIBLE EXPLANATION OF THE TEST'S LACK OF VALIDITY

In an effort to explain the invalidity of the amplified Multiple Choice Rorschach the following hypothesis was considered. Uniform scoring of only those answers falling into poor categories may be insufficiently refined for optimal discrimination. Responses, although falling in the same category, may deserve increased weights on some cards, decreased or even no weights on other cards. The present authors [6]

[1] The authors are indebted to Dr. Benjamin Balinsky for permission to use his data.

found this to be true of the original Multiple Choice Rorschach. Does this finding also apply to the amplified form? To check this hypothesis, we determined the frequency with which normals and abnormals selected each of the 300 responses as first choice. Although 100 cases of each group can hardly be considered an optimal number of cases for a frequency analysis, the findings are suggestive:

1. Using a critical ratio of 2.00 or over as the criterion, out of 150 good responses 15 discriminate in the normal direction and 14 in the abnormal direction. Good responses classified in the same category often vary in degree or direction of discrimination from card to card, and even on the same card. For example, although response 3 ("A pelvis") is significant in the normal direction in Group A of Card I, response 3 ("Vertebra") in Group B of the same card is not at all discriminative, and response 3 ("A red brooch") on Card III is discriminative in the abnormal direction.

2. Out of 150 poor responses 15 discriminate significantly in the abnormal direction and five in the normal direction. Poor responses classified in the same category often vary in degree or direction of discrimination from card to card, and even on the same card. For example, although response 7 ("An X-ray picture") is discriminative in the abnormal direction in Group A on Card VI, response 7 ("An X-ray of the spine") in Group C of the same card is non-discriminative, and response 7 ("Clouds") on Card VII is discriminative in the normal direction.

SHORTCOMINGS IN TEST FORM

In administering the amplified Multiple Choice Rorschach the following shortcomings in the test form were observed:

1. Many subjects, particularly patients, experienced considerable difficulty in understanding the instructions. They were most often confused as to when and where underlining or checking was required.

2. The "Nothing at all" response was subject to equivocal interpretation. Some subjects were reluctant to use this response since they saw either some of the suggested responses in the other groups or possible responses not listed at all. Obviously, the phrase "None of these" should have been used instead of "Nothing at all."

3. The test cannot be self-administered safely even after insuring that the patient has begun properly. Many subjects, particularly patients, require the examiner to hand them the inkblots in order to insure their correct order and proper position.

4. Individual administration usually takes from 20 to 40 minutes which seems too long for a rapid screening test.

It might be possible to overcome these shortcomings by reconstructing the test in some different form. For example, individual booklets could be prepared in which reproductions of the Rorschach blots, both colored and uncolored, were available for each subject. Under each blot would appear ten pairs of responses. One item of each pair would be selected from responses chosen predominantly by normals, the other from responses chosen predominantly by abnormals. To each pair would be added a third choice, "Neither." The subject would be requested to underline one of each pair of responses which he felt best described the inkblot. If in his opinion neither described the inkblot adequately or if he could see neither, he would be asked to underline "Neither." He would be urged not to spend too much time on any one pair.

The above modifications would permit self-administration, simplify instructions, yield 100 responses uniformly for each record, and might possibly reduce the necessary time for taking the test.

CONCLUSIONS

The fact that the amplified Multiple Choice Rorschach scored according to Harrower-Erickson's recommendations does not discriminate between normals and obviously disturbed psychiatric patients indicates that the test in its present stage of development cannot be used for screening out aberrant personalities. In fact, it may be questioned even as an instrument for determining group differences in abnormality. Instead of improving on the original form of the test it may be that the author has unwittingly succeeded in impairing its effectiveness.

The results of item analysis strongly suggests at least one reason why this form is ineffective. The basic shortcoming of the original form seems to have been enhanced; too many non-discriminating responses are weighted and too many discriminating items are unweighted. It is clear that for optimal discrimination *all* discriminating items and *only* discriminating items should be weighted in accordance with the degree and direction of their discriminating power.

REFERENCES

1. Balinsky, B. "The Multiple Choice Group Rorschach Test as a Means of Screening Applicants for Jobs," *Journal of Psychology*, 1945, 19: 203-208.
2. Challman, R. C. "The Validity of the Harrower-Erickson Multiple Choice Test as a Screening Device," *Journal of Psychology*, 1945, 20: 41-48.
3. Due, F. O., Wright, M. E., and Wright, Beatrice A. "The Multiple Choice Rorschach Test in Military Psychiatric Differentiation: The Use of Statistical Criteria," In Mary R. Harrower-Erickson and M. E. Steiner, *Large Scale Rorschach Techniques*. Springfield, Ill.: Charles C. Thomas, 1945. Pp. 195-204.
4. Harrower-Erickson, Mary R., and Steiner, M. E. *Large Scale Rorschach Techniques*. Springfield, Ill.: Charles C. Thomas, 1945.
5. Jensen, M. B., and Rotter, J. B. "The Validity of the Multiple Choice Rorschach Test in Officer Candidate Selection," *Psychological Bulletin*, 1945, 42: 182-185.
6. Malamud, Rachel F., and Malamud, D. I. "The Multiple Choice Rorschach: A Critical Examination of its Scoring System." To be published.
7. Wittson, C. L., Hunt, W. A., and Older, H. J. "The Use of the Multiple Choice Group Rorschach Test in Military Screening," *Journal of Psychology*, 1944, 17: 91-94.

SIDELIGHTS ON THE USE OF INTELLIGENCE TESTS

BY DONCASTER G. HUMM
PERSONNEL SERVICE
LOS ANGELES, CALIFORNIA

OUR many years of use of intelligence tests have brought to light a generalization which may be helpful. These observations center about the circumstance that intelligence is a part of personality. While it is always possible to consider intelligence by itself, apart from other aspects of personality such as interests, temperament, and physical fitness, it is not possible in the last analysis to get a meaningful interpretation of intelligence without considering these other factors also. This follows for the reason that manifestations of intelligence are conditioned by other factors in personality.

Indeed, the consideration of other factors of personality, in addition to the factor of intelligence, itself, seems to bring considerable illumination on the definition of intelligence. For this reason, some of the concepts of intelligence are reviewed here as a preliminary step to the presentation of our own view of the influence on intelligence of some of these other factors.

When Binet and Simon made the first intelligence test, they aimed at measuring something which they termed "general intelligence." Binet's conception of intelligence emphasized three characteristics: (1) its tendency to take and maintain a definite direction; (2) the capacity to make adaptations for the purpose of attaining a desired end; and (3) the power of auto-criticism. This is a concept of intelligence which emphasizes the ability to solve problems. Modern psychology would criticize it as being too broad, including as it does, some temperamental (or behavior) traits. Ebbinghaus thought the essence of intelligence lies in the comprehending, in a unitary, meaningful, whole, impressions and associations which are more or less independent, somewhat confused, and even partly contradictory. The Gestalt school would agree with this definition and confirm it by saying that intelligence is principally the ability to see the constellation or meaningful pattern or integrated structure of component units. Such a concept of intelligence is illustrated by the ability to grasp the fact that rungs, seats, and upholstery constitute a chair and not a meaningless jumble.

Neumann describes intelligence as the power to create or elaborate new products out of impressions afforded by memory and the perceptions of the senses. Stern defines intelligence as "the general capacity consciously to adjust one's thinking to new requirements: its general adaptability to new problems."

Intelligence has also been defined as academic aptitude—with possibly the inference that it was an aptitude more useful in theoretical than in practical situations. While it is true that persons who are highly intelligent do better at school work than those who are not, it is equally true that many persons have been found to be highly intelligent who have had no schooling at all or who have done poorly in school. It seems more

reasonable to conclude that persons who are intelligent are likely to have academic aptitude, than to conclude that the terms are strictly synonymous.

We are inclined to like the English viewpoint. Spearman, Hart, and other English authors define intelligence as the "common central factor which participates in all sorts of special mental activities."

Fundamentaily, all of these definitions are in agreement. Their differences lie principally in the attitude of the author and his attack on the problem of defining. If any valid criticism might be made of these definitions (and it should be noted that these definitions are too sketchily presented to afford a complete exposition), it is that many men in attempting to define intelligence have included characteristics which properly belong in the field of temperament.

Our opinion is that intelligence may be summarized in the term, *mental power*. As many of these authors quoted would agree, intelligence is the ability to solve problems, the ability to grasp complexity, the ability to make inferences, the ability to manipulate data rapidly, and, in fact, all of the abilities required in making mental manipulations, which have as their final products comprehensive and integrated concepts.

This concept of intelligence as mental manipulating ability requires some further consideration to be fully understood, since there are several different aspects. Perhaps a good way to consider this is to show in parallel fashion the differences between individuals of high intelligence and those of low intelligence.

A person of high intelligence is able to apply superior memory and superior abstractive power to a task of mental manipulation; while a person of inferior intelligence is limited in manipulating by an inferior memory span and an inferior ability to make abstractions. An individual of high intelligence is thus able to keep many things in mind, especially of abstract nature, as he solves a problem, while an individual of low intelligence can handle, at best, only a few.

A person of high intelligence also can keep many separate and distinct manipulations in progress at one time, while a person of inferior mental ability may be limited to only one or two. As a consequence, a person of high intelligence sees many inferences, while a person of low intelligence is likely to fail to see side issues.

The person of high intelligence, because of his superior memory span, is able to persist in mental manipulation and carry it forward from step to step over a long chain; while a person of low intelligence cannot do this. The latter individual is likely to lose the thread. As a consequence, he can carry mental manipulations through only a few steps.

Finally, a person of high intelligence can make all of these manipulations rapidly.

The most common mistake made in the attempt to understand intelligence is to attribute more to intelligence than psychologically belongs to it. Psychologists constantly are being asked to explain the reason for individuals who have made high scores in intelligence tests failing to use that intelligence to good advantage. For example, one hears such expressions as this, "You know, Bill received 137 I.Q. in the Blank Intelligence Test, and yet doesn't seem to have common sense. Why is that?"

The explanation, of course, is simple. Bill has plenty of power to manipulate complex data, but he does not have the temperament to use that power to good advantage. If, for example, Bill is an emotional individual, he is much more likely to let his feelings guide his be-

havior than his head. If, on the other hand, he happens to be a stubborn and aggressive individual, he is likely to be ruled by his prejudices rather than by the facts in the case.

We are constantly meeting with these anomalies. So constantly, in fact, that we have come to the conclusion that the power properly to use intelligence is as necessary as the possession of intelligence.

Another paradox frequently manifests itself. This is the paradox of a man's having high intelligence and yet having striking and handicapping limitations in certain fields. One frequent example of this is limitation in the field of mathematics. There again we meet individuals who are very intelligent and yet are exceedingly handicapped in their ability to handle even the simplest of computations. In fact, a recent popular article calls attention to a very brilliant man who is so limited in mathematical ability that he cannot successfully count his change.

There is one school of thought which explains this paradox by holding that intelligence is made up of many particular skills. Thus, there is postulated mathematical intelligence, musical intelligence, mechanical intelligence, and a host of other intelligences.

There is much to be said for this view of the subject, but we prefer a simpler explanation, namely that handicaps in certain fields are due to lack of interest. This is exemplified by the fact that when some individuals meet defeat, they attempt to block out of their lives the whole field in which they have met the defeat. Thus, if such an individual happens to have an unskillful arithmetic teacher in a lower grade or happens to be absent from his arithmetic class long enough to miss essential instruction, he is very likely to let himself take a set against the whole subject of mathematics. As a consequence, thereafter he goes through life without ability or skill in that field.

This becomes more understandable when we consider that there are many aspects of thinking. An individual who is predominantly auditorily minded is likely to think in words; a person who is predominantly visually minded is likely to think in pictures; an individual who is predominantly kinesthetically minded is likely to think in operations and motions. The individual who is roundly developed has at least a sufficient power to think in all of these manners. There is a certain minimum of accomplishment required in each, lest the individual be handicapped. Blocking in any of the three fields may occur on a temperamental basis with narrowed interests as the end result.

We have been obliged to qualify our reports of intelligence in the cases of individuals who clearly have limitations of interests with a consequent handicap in some particular field of mental manipulation.

As far as the practical use of intelligence tests is concerned, it makes little difference whether one considers that intelligence is a unitary and integrated manifestation or that there are many intelligences. The important task in the use of tests is to explore the individual's assets and liabilities. Thus, if intelligence is a general mental power conditioned by interest, it is expedient to explore the skills which have been developed. On the other hand, if intelligence is multiple and the resultant of several constitutional powers, it is equally expedient to see which of those several powers are present and which are absent.

Nevertheless, from a theoretical standpoint and from the standpoint of application in the field of education and of temperamental integration, the uni-

tary nature of intelligence is extremely important.

The negative aspects are particularly worth our attention. If we assume that some persons are so lacking in "mathematical intelligence" that they cannot be taught this subject, we subscribe to a seriously limiting theory. If, on the other hand, we assume that an individual is limited in mathematical skill because of temperamental blocking or any other lack of interest, we subscribe only to the recognition of remediable handicap.

A consideration of the variations in sensory equipment is, on first thought, likely to make one subscribe to the theory of multiple intelligence; since lack of some such equipment is likely to result in serious handicap of expression. Thus, a person who is tone-deaf cannot become a roundly developed musician. We are inclined, however, to the opinion that mental manipulative power is not here involved. Rather the individual is limited in the materials to be manipulated.

We have been able to reconcile this seeming anomaly by considering intelligence as potential aptitude and its expression as realized aptitude or skill. Thus, it is our view that lack of sensory equipment may be a serious handicap to the employment of intelligence, but that it does not necessarily imply an inability to do mental manipulations of high order.

The foregoing will throw a considerable light on the practical use of intelligence tests. In particular, it will bring sharply to attention many misuses.

It may be taken for granted without question that it is a mistake to use intelligence tests without considering also the factors of interest, temperament, and other aspects of personality.

For example, we have observed that a few persons of certain types of temperament do not do well in the ordinary timed intelligence test. An individual, for example, who is depressed is likely also to be so retarded that his mental processes are slowed up. If such an individual is given a timed intelligence test, that test will reveal him as having less mental power than he actually possesses when not depressed. Likewise, an individual who is very deliberate and methodical in his thinking is likely to be penalized by such a test.

Introverted individuals are particularly likely to be penalized by some particular phase of an intelligence test. This is due to the tendency of introverted individuals to have narrowed interests or aversions or to have blockings against some fields of activities. For example, an intelligence test which contains too many tasks involving the use of numbers or geometrical diagrams may unduly penalize some persons of introverted temperament.

This has repeatedly been brought to light in our testing laboratory by the different ways in which test subjects will respond to timed tests as contrasted with untimed tests. We seem consistently to secure better test results from untimed tests than from timed tests in the cases of individuals who have tended to be depressed and retarded.[1]

The question may be reasonably asked at this point, "Why use timed tests when they have such limitations?"

In the first place, for a large proportion of subjects, the results with timed and untimed tests are substantially the same, so that the very considerable ad-

[1] This observation has come from our use of the Humm-Wadsworth Temperament Scale in a battery containing also the Wonderlic Personnel Test as contrasted with the California Test of Mental Maturity used as an untimed test. The observations have been so consistent as to lead us to make this statement. However, we are at work on a study to be published later which will consider this from a quantitative fashion.

ditional time needed for an untimed test does not give a proportional improvement in the test results.

In the second place, for some jobs, speed of mental processes is quite as important as mental power. For such jobs, a low score on a timed test may be disqualifying, no matter what its explanation.

In the third place, many useful intelligence tests have been standardized with time limits, and the making of untimed tests for group use has only just begun. It is entirely indefensible to use a test without enforcing the time limit if it was standardized as a timed test.

The physical condition of the test subject is also important in testing for intelligence. A great many people have serious eye handicaps that are not well taken care of. Workers with shortsightedness, and farsightedness are very numerous. Among older workers there are a great many individuals who cannot focus on the printed page at all without the assistance of properly refracted glasses. All this makes it important to observe test subjects while they are taking tests to see if there are any manifest indications of such serious eye difficulties.

Other physical conditions may also enter into the picture, especially physical conditions which cause acute discomfort. While compensations for such conditions in the testing room may be considered to be somewhat of a compensation for temperamental behavior, it is nevertheless important in intelligence testing. For example, if the test subject is very restless and fidgets about, it is well to question him and determine if he feels up to the task of taking the tests. It is well to do this in such a way that he feels the test administrator has a real interest in his welfare and is hopeful that everything possible will be done to enable him to make a good showing.

In fact, it is exceedingly important in the testing room to keep the test subjects constantly under observation, not only for the purpose of assisting them in making a good showing, but also for the purpose of securing results which may safely be accepted.

All this points unmistakably to the need of technical skill in the interpretation of intelligence test results.

The fact that intelligence tests are statistical tools makes the consideration of probable error pertinent. Usually the group tests used in industry have a probable error of the score of approximately six points in the Intelligence Quotient. This means that the chances are even that the true intelligence will be within six points of the obtained Intelligence Quotient.

The implications of this report are interesting. If the chances are even that the true intelligence will be within six points, the chances are 1 to 4.6 that it will be in error by 12 points; 1 to 22, by 18 points; and 1 to 100, 24 points. Stated in another fashion: about 1 per cent of the ordinary intelligence tests will be 24 points in variance with the correct I.Q. However, if two tests are used and both of these tests are equally good —being approximately of the same standards as those mentioned — and if these two tests both report I.Q.'s within 6 points of each other, the chances are only about 1 to 100 that the average of these two tests will be off by more than 5 I. Q. points.

All of this makes it important that greater care should be exercised than is usually taken in the employment of intelligence tests. The way in which such care should be taken might be summarized in the following precautions:

(1) Intelligence tests should be used in combination with tempera-

ment tests and interest tests, particularly to determine the handicaps of disposition and the blocking in fields of mental manipulations.

(2) All test subjects should be carefully observed while they are taking intelligence tests, especially to determine whether or not they are having eye difficulties. Marked restlessness or other evidence of annoyance is an indication that the individual should be questioned.

(3) At least two intelligence tests should be the minimum used in testing any subject; preferably one a timed test, and, another, an untimed test.

(4) The statistical implications, especially the probable error of the score of intelligence tests, should be kept in mind.

Much of the foregoing discussion has been critical of intelligence tests and has perhaps overstressed their limitations. This should not be taken to indicate that these tests are not acceptable measures. The contrary is the case. A modern intelligence test is the best obtainable tool for measuring mental capacity. Its limitations are simply those of any tool; namely, that a good tool deserves a skilled worker, and that a good tool in the hands of an unskilled worker will not of itself do good work.

To summarize: To us, intelligence seems to be mental power expressed in ability to perform mental manipulations ranging with the increase of intelligence from the simple to the complex and from the single to the multiple. Intelligence should be considered to be a part of personality, and personality in turn should be considered to be the sum total of an individual's attributes. Thus, in the behavior of the individual, intelligence, interests, temperament, and, in fact, all of his characteristics are constantly interacting. It is the interacting of intelligence with these other characteristics which results in the efficiency with which intelligence is used.

THE USE OF CERTAIN STANDARDIZED TESTS IN THE SELECTION OF INSPECTORS IN AN AIRCRAFT FACTORY[1]

BY A. Q. SARTAIN
SOUTHERN METHODIST UNIVERSITY

SINCE in many ways the job of an inspector in a modern factory is an exacting and very important one, it is natural that considerable interest should attach to the selection of persons to fill this job. The problem of this study is to determine the extent to which success as an inspector in a particular plant can be predicted from the use of certain standard psychological tests.

SUBJECTS AND CONDITIONS OF THE STUDY

The following tests were given to employees of the inspection department of an aircraft factory: MacQuarrie Test for Mechanical Ability; Otis Self-Administering Test of Mental Ability (Higher Examination, Form A, 20-minute time limit); Cardall Test of Practical Judgment; Minnesota Paper Form Board (Revised Edition); Industrial Training Classification Test (Form A); Bennett Test of Mechanical Comprehension (Form AA); and the O'Rourke Test of Mechanical Aptitude (Form A). Forty-six employees took these tests. These employees were probably representative of employees in the department, some of them being relatively new but many of them being among the most experienced in the department. For each employee two independent ratings on a form constructed for the purpose were secured, these ratings being made by the two instructors in a refresher course for inspectors. The job performance of most of these employees was known personally to these instructors, who, of course, knew their class performance as well. Each instructor had had each employee in his class for about 20 hours at the time of the rating. The sum of these two ratings on each employee constituted the criterion.

RESULTS OF THE STUDY

One item of concern, of course, was the reliability and validity of the ratings. The correlation between the ratings of the two raters was .772, which seems sufficiently high to justify confidence. For 20 of the employees there were available, one year later, at least three and in most cases four periodic merit ratings made by their supervisors. The average of these ratings correlated with the criterion of this study to the extent of .420, a fact which seems to indicate that the criterion has considerable validity.

Table 1 presents the results of intercorrelating the test scores and the criterion, and also the mean and standard deviation of each variable. It will be observed at once that all of these coefficients are postive and many of them moderately high. Correlations with the criterion are at least as high, on the whole, as the correlations between the

[1] The writer wishes to express his appreciation to the Texas Division of North American Aviation, Inc, for supporting and making possible this study. Special acknowledgment is made of the help of Mr. Ross A. Peterson, Director of Education.

tests.

The next question was the extent to which the criterion could be predicted by the best possible weighting of the test scores. Here the multiple regression coefficient was found to be .787 and the formula for prediction of the criterion was (in terms of standard deviation scores)

TABLE I

INTERCORRELATIONS OF TEST SCORES AND CRITERION, AND MEAN AND STANDARD DEVIATION OF EACH

Test	MacQ.	Otis	Prac. Judg.	Paper Fm. Bd.	In. Tr. Clas.	Mech. Comp.	O'Rourke	Criterion
Mac-Quarrie	—	.623	.351	.308	.499	.437	.204	.650
Otis		—	.634	.616	.587	.175	.158	.643
Prac. Judg.			—	.426	.370	.183	.353	.606
Minn. P. F. Bd.				—	.644	.274	.086	.473
In. Tr. Clas.					—	.342	.298	.421
Mech. Comp.						—	.546	.316
O'Rourke							—	.243
Mean	58.63	28.61	160.1	34.52	15.56	21.37	177.5	5.886
S.D.	10.99	9.48	45.4	10.50	4.70	8.70	49.8	1.375

Crit. = .487(MacQ) + .060(Otis) + .337 (Prac. Judg.) + .236 (Minn. Fm.Bd.) — .142(I.T.C.) — .008(Ben.) + .042(O'R.).

Based on raw scores this formula becomes

Crit. = .0609(MacQ) + .0087(Otis) + .0102 (P.J.) + .0309(M.F.Bd.) — .0416(I.T.C.) — .0013(Ben.) + .0012(O'R.) — 1.835.

It is clear that the MacQuarrie, the Practical Judgment and the Minnesota Paper Form Board contribute most to the predictive value of the battery. A multiple regression equation involving them alone yields a coefficient of .780 and the following formula (in terms of raw scores):

Crit. = .0585(MacQ) + .0113(P.J.) +. 0227(Minn.) — .137.

Finally, the criterion may be predicted from the MacQuarrie and the Practical Judgment tests alone to the extent of .765, in which case the formula becomes (in terms of raw scores)

Crit. = .0624(MacQ) + .0132(P.J.) + .110.

SUMMARY AND CONCLUSIONS

Forty-six employees of the inspection department of an aircraft factory were given the following tests, and their scores correlated against the average of two ratings as to efficiency on the job: MacQuarrie Test for Mechanical Ability; Otis Self-Administering Test of Mental Ability (Higher Examination, Form A); Cardall Test of Practical Judgment; Minnesota Paper Form Board (Revised Edition); Industrial Training Classification Test (Form A); Bennett Test of Mechanical Comprehension (Form AA); and the O'Rourke Test of Mechanical Aptitude (Form A). The following conclusions were drawn from the study:

1. The two ratings agreed with each each other quite well (r, .772) and with subsequent periodic merit ratings fairly well (r, .420 for 20 cases). Thus the criterion seemed to have considerable reliability and validity.

2. The best combination of the seven test scores made a very good means of predicting success on the job as judged by the criterion (R, .787).

3. Three of the tests, the MacQuarrie, the Practical Judgment, and the Minnesota Form Board, did almost as well as all seven (R, .780).

4. Two of the tests, the MacQuarrie and the Practical Judgment, when used alone did substantially as well (R, .765).

5. If the MacQuarrie and Practical Judgment tests were to be used in the selection of inspectors in this plant, scores on the former should be given approximately five times the weight of scores on the latter.

FUNCTIONS OF A PSYCHOLOGIST IN A RESIDENTIAL SCHOOL FOR THE DEAF

BY HELMER R. MYKLEBUST
NEW JERSEY SCHOOL FOR THE DEAF

THERE are 64 public residential schools for the deaf in the United States. The populations of these schools vary from less than 100 to over 600 students. During the school year 1944-1945 there were 13,312 students enrolled; an average of 208 per school [1]. The common age range is from 5 to 21 years. Because of increased employment of students at the upper age levels, it is generally agreed that the current enrollment is approximately 10 per cent below that of peace time. Although the number of children requiring special schools because of severe hearing losses does not represent a large percentage of the school population, this group does warrant increased interest and attention from applied psychologists.

The psychologist engaged in clinical diagnosis of deaf children and of children referred for examination because they are presumed to be deaf, has an opportunity to accumulate data relative to aphasia, congenitally delayed speech, and language development. He can observe the behavior disturbances which commonly result when the hearing defect is due to diseases such as meningitis. He can conveniently obtain objective information pertaining to the effect of lack of hearing on mental development and attitudes. The primary purpose of this article, however, is that of outlining the functions of a psychologist in a residential school for children with impaired hearing from the point of view of habilitation or rehabilitation.

Clinical diagnosis

Because children with marked hearing deficiencies usually are retarded in language acquisition, the psychologist must adapt and apply non-language techniques. It is his function to use such measures in determining mental capacity, aptitudes, balance, locomotor coordination, etc. On the basis of the clinical diagnosis he must make recommendations for classification for academic and vocational training. Inasmuch as it has been determined that the greatest handicap of the deaf is that of social rather than mental retardation [2], [3], a major responsibility of the psychologist clinically is the determination of social competence. He must assist principals, teachers, and housemothers in formulating programs for the development of normal social maturity.

Speech and language

The development of speech and language constitutes one of the most difficult problems in the education of children with a marked impairment of hearing. In the case of a child who has never heard or who has no residual hearing speech must be developed by the kinaesthetic approach, whereas with the child whose hearing became impaired after speech was acquired, emphasis must be placed on retaining the fundamental speech pattern. The primary function of the psychologist with respect to speech and language is to suggest techniques which are based on es-

tablished principles of learning and to evaluate the results from the point of view of the total adjustment of the child.

Audiometrics

A significant function of the psychologist is that of administering audiometric tests. This work demands as much clinical skill, resourcefulness, and insight as does diagnosing mental ability. Clinical audiometry [4] requires that the psychologist be familiar with psycho-physical methods. Effectual audiogram interpretations and recommendations stating the type of acoustic program indicated are part of the audiometric examination.

Amplifying equipment

The psychologist in a residential school for the deaf must be informed in regard to group and portable amplifying equipment. It is his responsibility to recommend the use of such equipment whenever the problem of rehabilitation presented by the child might be alleviated in this way. He must call attention to the critical role of motivation in securing desirable results by the use of amplification.

Guidance

A substantial amount of the psychologist's time is devoted to student guidance. By collecting objective data and through close daily contact he is in a position to offer assistance advantageous to the individual student, particularly with respect to aptitudes and abilities which might be capitalized.

Research

Because of the limited amount of experimentation relative to hearing impairments and their effect on learning and adjustment, it is essential that the psychologist conduct research routinely. The residential school plan is favorably adapted to this purpose. Through research it is practicable for the psychologist to maintain contact with the public school program for children with slight hearing deficiencies. At present due to intensification of the problem of hearing defects through the incidence of military aural casualties, he might assist organizations which are confronted with rehabilitating deafened veterans.

Training needs

Few applied psychologists are being trained for work with acoustically handicapped children. Training standards for such work should include the usual background in clinical psychology together with training in audiometry and the physiology of hearing. State departments of education regularly require one year of special training in work with deaf children. The course for the psychologist who wishes to enter this field is a rather long one, but the opportunities might well justify the time and effort. It seems desirable that applied psychologists make an effort to bring about adequate training standards for persons interested in entering this field.

REFERENCES

1. *American Annals of the Deaf*, 1945, 90, (1): 7.
2. Bradway, K. "The Social Competence of Deaf Children," *American Annals of the Deaf*, 1937, 82 (2): 122-40.
3. Burchard, E. M. L., and Myklebust, H. R. "A Comparison of Congenital and Adventitious Deafness with respect to its Effect on Intelligence, Personality, and Social Maturity," *American Annals of the Deaf*, 1942, 78, (2, 3, 4); 140-54, 241-51, 342-60.
4. Bunch, C. C. *Clinical Audiometry*. St. Louis, Mo.: C. V. Mosby Co., 1945. Pp. 186.

A NOTE ON PSYCHOTHERAPY AS A FUNCTION OF PSYCHOLOGISTS

BY RAY H. BIXLER
UNIVERSITY OF MINNESOTA

WHETHER or not the psychologist should deal with emotional disorders has been held open to question on grounds of training, ethics, legal ramifications, and other stumbling blocks, real or imagined. Other professional workers who are equally as vulnerable seldom encounter the same degree of opposition. Such differential resistance should serve as a warning to the psychologist entertaining desires to serve as a therapist. It is proof that he must be "cautiously aggressive." Referral of *possible* psychosomatic disorders for medical diagnosis and *possible* psychotics for psychiatric treatment, while retaining the right to counsel neurotic or milder disorders tends to establish the psychologist in this realm without encouraging strong opposition. This practice has resulted in a minimum of opposition for the writer and his colleagues.

The policy of including psychotherapy as a function of the psychologist is given impetus by the recent classification of senior counselors (psychologists with a Ph.D. or equivalent) in the Student Counseling Bureau at the University of Minnesota by the Public Administration Survey. Prior to formulation of the job description, counselors were asked to fill out a comprehensive form describing their responsibilities. Two counselors indicated that they served as psychotherapists, while a third stated that he specialized in this function. The form was amended by the director of the Bureau and temporary classification was made by P.A.S. interviewers. At a later date, each counselor was interviewed in order to clarify the data attained and to evaluate its authenticity. The excerpts which follow were selected from a two-page report[1] describing the final formulation of duties (1, classification number 9134):

1. This is a specialized professional work involving the counseling of students who seek advice on personal, family, social, and academic problems. . .
2. Senior counselors do specialized work in one or more of such fields as remedial reading, psychotherapy, or research analysis. . .
3. A senior counselor may be in charge of the remedial clinic of the Bureau. Diagnoses the reading disability in terms of ocular abnormalities caused by psychological conditions or emotional disorders.
4. Receives client referrals where there is need for special counseling service. Applies clinical psychotherapeutic procedures as required to overcome individual problems.
5. May devote a greater proportion of his time to conducting research related to counseling and personnel methods.

[1] University of Minnesota Civil Service Position Classification Plan (unpublished).

6. The counselor should have a thorough knowledge of psychology or educational psychology and of mental measurements and statistics, clinical and abnormal psychology, counseling procedures, and the modern accepted philosophy of college education.

The counselor is expected to deal with vocational, educational, and emotional problems, specializing in any one of these areas or in research. The traditional and undisputed roles of research, remedial reading, and vocational guidance are not emphasized over the counselor's "clinical psychotherapeutic procedures." Recognition of the psychologist as a psychotherapist by an organization such as P.A.S. can prove encouraging and beneficial to those interested in the continued development of psychotherapy as a recognized and integral part of the psychologist's function. The policy followed by the Student Counseling Bureau should prove to be feasible in other agencies.

TRAINING IN CLINICAL PSYCHOLOGY—A NOTE ON TRENDS

BY DAVID SHAKOW
WORCESTER STATE HOSPITAL

FUNDAMENTAL to the current discussions of the problem of training in clinical psychology must be a recognition of the roles to be played in the process by the varying approaches now prevailing in clinical and abnormal psychology. An examination of these reveals that in relation to the two major emphases represented, that concerned primarily with the individual subject and that concerned with groups of subjects, at least four main trends can be differentiated.

The first may be characterized as advocating a *dynamic* approach to the problems in the field. The group representing this point of view is primarily interested in the understanding of the genetic development of motivation and personality organization, both in their structural and contentual aspects. It sees the problems of clinical psychology as one of research on the individual case directed at obtaining data about the individual both for generalizations about him and about the group of which he is a member. It frequently uses these data for therapeutic purposes. The affiliations of this group are largely with a dynamic psychology, psychiatry and psychoanalysis.

The second may be characterized as a *diagnostic* approach to clinical problems. The group representing this point of view is primarily concerned with the use of test devices which investigate the structural aspects of personality, e.g., in relation to intelligence and other capacities, aptitudes and skills. Its interest is in the light which these devices throw on the person's adjustment with a view towards making recommendations for disposition which are usually carried out by others. The affiliations of this group are mainly with educational and vocational workers.

The third may be characterized as the *diagnostic-therapeutic* approach. This group has certain affinities with each of the two former groups but differs from them in several respects. Although it has an interest in the use of tests for the understanding of the presenting problems it is mainly interested in the therapeutic implications of test results for the individual person. In contrast with the first group there is here not so fundamental or systematic an attack on the problems of human motivation nor is the therapy involved generally of such a searching and extended type. Its major interests are in diagnosis and certain specific types of therapy. Two sub-groups may here be distinguished: One of these accepts the principle of the psychiatrist-psychologist-social worker triad as the most desirable clinic organization; the other takes the view that this type of organization is not essential and that other affiliations may be equally satisfactory, e.g., those of psychologists with teachers, pediatricians, or social workers.

The fourth may be characterized as

the *experimental* approach. Its major interest is the study of clinical material from the experimental point of view. Here, also, two sub-groups may be distinguished. The main concern of one is with problems involving the cross-sectional structural characteristics of the deviant organism under varying conditions; the main concern of the other is with problems of a more dynamic kind, mainly cross-sectional but to some extent also longitudinal. Neither is interested in therapy per se—in fact, both generally take the view that therapy is not intrinsically a field for the psychologist. They are not interested in test devices as they relate to the individual case. Their concern is rather with the establishment of laws about types of deviants very much as certain groups of workers in normal psychology are interested in establishing laws about normal people. The individual deviant subject is considered by them merely as a means to such an end.

The above descriptions have attempted no more than to epitomize the essential nature of these differing points of view. In practice, obviously, there exists no such sharp distinctiveness—the overlapping among them is considerable and the shifts in emphasis with the passage of time pronounced.

All of these points of view should be reflected in a program of preparation for clinical psychology since they all have a contribution to make. An examination of the field, however, reveals that certain of these trends are gaining ground faster than others and we must therefore anticipate corresponding changes of emphasis in the nature of the preparation which the clinical psychologist will be expected to undertake.

The major change which seems to be taking place lies in the increasingly greater attention which is being given to what has been termed the "dynamic" approach. Psychologists, in the past, have been rather slow in occupying themselves with this field—a field which to the layman is definitely that of the psychologist and to psychologists themselves becoming increasingly so. The historical factors, deliberate and accidental, personal and impersonal, which have deflected the interest of psychologists from the complicated problems of motivation and personality development need not be gone into here. But that there has been such a lack of interest until fairly recent years cannot be denied. Psychoanalytic psychology slowly boring its way through the rather resistant skin of a non-personal psychology organized largely on a physical model, has finally been able to reach deep enough to meet burgeoning long-repressed inner yearnings. The juncture of the two has resulted in the recent remarkable growth of interest in personality dynamics and genetics. It is reasonable to suppose that no field of psychology will be more influenced by this development than will be clinical psychology.

If I am not wrong in the evaluation of this trend, it seems desirable for psychology to place more emphasis than it has on the aspects of the program of preparation for clinical psychology which the trend represents. In this connection the increasing concern of psychologists with the problems of psychoanalysis and its techniques should be encouraged. There is perhaps no better introduction to the complexities of human motivation than through some form of psychoanalysis. For this reason serious thought should be given to the desirability of encouraging persons about to enter clinical psychology to undergo a psychoanalysis. The pros and cons of this problem for psychologists are perhaps best stated in the symposium of analyzed psychologists edited

by Gordon Allport.[1] If a psychoanalysis is deemed advisable as part of a program for clinical psychologists special care will have to be taken to select analysts who are relatively free from doctrinairism and who have an interest in psychological theory as well as in therapy. Although a Freudian type of analysis, because of its relative completeness, is perhaps generally preferable to other types of analysis, any detailed self-examination under competent guidance might serve as well for most candidates. In this connection, even Freudian psychoanalysts are beginning to recognize the desirability of broadening the base of psychoanalytic training to include non-Freudian approaches. It is, understood, of course, that the purpose in proposing such a step is not to advocate the acceptance of a particular theoretical point of view; rather, it is to suggest the consideration of a technique which many have found valuable for the acquisition of insight into the complexities of personality dynamics.

Whatever the reaction may be to the last suggestion, it is clear to those who have given thought to the subject of trends in clinical psychology that no program of preparing clinical psychologists can be considered adequate which does not recognize the need for providing the student with a back-ground which takes cognizance of the various points of view described. The relative emphasis will for the present presumably have to depend upon the personal philosophy of the instructor and upon his sensitivity to growing trends in a rapidly developing field.

[1] Allport, G. W. (Ed.) Symposium. Psychoanalysis as seen by analyzed psychologists. *J. Abnormal and Social Psychology*, 1940, 35: 3-55, 139-225, 305-323.

GRADUATE INTERNSHIP TRAINING IN PSYCHOLOGY

REPORT BY THE SUBCOMMITTEE ON GRADUATE INTERNSHIP TRAINING TO THE COMMITTEES ON GRADUATE AND PROFESSIONAL TRAINING OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION AND THE AMERICAN ASSOCIATION FOR APPLIED PSYCHOLOGY

ALONG WITH numerous other influences the present national emergency has brought to the fore the problem of the education of the psychologist, particularly the education of the professional psychologist. Though long recognized as requiring attention, until recently such attention has been only of an isolated and sporadic kind. In the last few years, however, a more concerted effort towards the solution of the problem has been made. One aspect of this progress is to be seen in the series of steps which has led to the present report on preparation for clinical psychology by the Subcommittee on Graduate Internship Training appointed by the Committee on Graduate and Professional Training of the American Psychological Association (E. R. Guthrie, Chairman) and the American Association for Applied Psychology (B. V. Moore, Chairman). The Subcommittee (hereinafter referred to as "the Committee") met at the Vineland Training School for a period of discussion, October 12-14, 1944. The present report, of which a shorter form has been prepared, is based on this discussion. Both forms have the approval of all of the members of the Committee.

Although from the very early period of clinical psychology there was some pressure, for example, by Witmer, for the establishment of clinical clerkships as part of the instruction, generally there was little recognition of the need for the modification of standard courses, or for the introduction of new types of courses and educational procedures in clinical psychology. Only in recent years, with the realization of the proportion of the American Psychological Association membership engaged in professional work,[1] the organization of the American Association for Applied Psychology, and several other factors, has serious attention been paid to the problem of adequate preparation.

Although psychology has officially been quite slow in accepting itself as a profession, it does not follow that the same slowness should characterize the process of so establishing itself. Our discipline is in the fortunate position of not having to go through too wide a range of experimentation to determine the proper program of preparation necessary for the attainment of professional status. Without servilely following their procedures, psychology can glean many useful suggestions from the experience of those fields of endeavor which have during recent years under-

[1] Hunter has indicated that in 1940, 17 per cent of the members and 31 per cent of the associates of the American Psychological Association were engaged in *full-time* professional work. The 1943 *Directory* of the American Association for Applied Psychology lists approximately 650 members.

gone a similar process of professional self-establishment in closely allied fields of human relations, notably, medicine and social work.

That the science of psychology has responsibilities in solving the problem of adequate professional service is now being increasingly recognized. The need for applied psychological work is great and unless psychology can provide adequately prepared personnel, other disciplines, which recognize both the need and the responsibilities involved, will take over the functions which are properly the province of the psychologist or, at least, will set the standards for him. The scope of activity permitted the clinical psychologist has generally been quite limited. To explain this situation, the suggestion has frequently been advanced that it was primarily due to the poor preparation of its practitioners and the low standards in the field generally. Whether this is so or not, certainly any real broadening of its scope can come only through the institution of sound professional instruction and standards.

From one standpoint it might be argued that clinical psychology, which may be defined, as it has been by Doll, as "the science, technique and art of employing psychological principles, methods and procedures to promote the welfare of the individual person for purposes of optimum social adjustment and self-expression," is the ground work for *all* professional psychology, whether educational, industrial or consulting. (It might even be held, with some cogency, that a background in clinical psychology is an essential part of the preparation of all but a few academic psychologists.[2]) For the present purposes, however, we shall limit ourselves to a discussion of the education of the *clinical* psychologist. With relatively few fundamental changes the general principles and the program of instruction outlined are adaptable to other fields of applied psychology such as the educational and the industrial. The preparation of specific programs for these fields would best be undertaken by persons with the proper qualifications in these fields.

The present report, although mainly directed at a detailed consideration of the various aspects of the internship per se, will necessarily have to consider the personal and academic qualifications for the internship, the integration with the academic program and problems of accrediting and certification. From this discussion naturally stems a series of recommendations which are presented for consideration by the Committee on Graduate and Professional Training.

OPPORTUNITIES FOR PROFESSIONAL PRACTICE IN PSYCHOLOGY

Whenever the need for improving the education of clinical psychologists comes up for consideration this question naturally arises: Are positions available for which students are to be prepared? There are those who hold that there would be few such positions and there are others who hold that there is a large potential demand for psychologists and that as soon as adequately prepared persons become available there will be a great sufficiency of openings.

Without a detailed survey both of job actualities and job potentialities it is impossible for anyone to speak authoritatively on the subject. Personal impressions are notoriously undependable and shift according to the status of the labor market. It would be most desirable for the Central Office of the newly re-

[2] It is not entirely inconceivable that the development of a considerable group of soundly prepared clinical psychologists would have an appreciable effect on the future of psychology as a whole.

organized American Psychological Association or the present Office of Psychological Personnel, to make a survey of both available and potential positions. Lacking such survey data, however, it is permissible to make some tentative sample estimates of the potentialities in two fields with which we are acquainted, namely, hospitals for mental diseases and schools for mental defectives.

The 1941 report of the Bureau of the Census on *Patients in Mental Institutions*[3] provides separate data for mental disease hospitals and for mental defective and epileptic institutions. Of the former there are 180 state, 27 veteran, 92 county and city, 182 private and 7 psychopathic hospitals. The 174 state hospitals which actually supplied data employed 64 full-time psychologists and psychometrists on their staffs, averaging 1 per 6,000 patients. If we consider only the 174 hospitals which reported, it is clear that if the latter were to employ only one psychologist for each 1,000 patients (a proportion which in relation to need is indeed conservative) the number of jobs available in these institutions would increase six-fold.

There are 91 state and 109 private institutions for the feeble-minded and the epileptic of which only 76 state institutions are included in the actual statistics. The latter group employed 57 full-time psychologists or psychometrists, an average of 1 per 1,795 patients. If we estimate even more conservatively than has Doll in a recent article and accept a "minimum" program of 1 psychologist to 500 patients rather than his ratio of 1 to 400, the 76 institutions mentioned have jobs potentially available for 200 rather than for some 50 psychologists.

The number mentioned here is in one sense Utopian, in another, the very minimum which, by reasonable social standards, institutions of these types should have. But the achievement of even this minimum involves a very considerable change in community attitudes and standards as well as a radical shift in the attitude of state legislatures. The accomplishment of such aims can come only from persistent activity on the part of socially conscious groups who are made aware of the need by the psychological as well as by other professional groups involved. If only a portion of two fields indicates the potential availability of some 400 to 500 more psychological positions, the magnitude of the potentialities throughout the social sphere—public schools, correctional institutions, welfare centers, old age centers, industrial organizations, and so forth, as described by Yerkes in his address to the American Philosophical Society — makes the Committee hesitate to consider them for fear of being justifiably accused of being impractical.

On the basis of the above estimates and the individual experiences of persons acquainted with the field, there appears to be some reason for believing that a considerable number of psychological positions are potentially available for which there is an insufficient number of adequately prepared personnel. This offers a further reason for giving detailed consideration to a program of adequate instruction in clinical psychology.

GENERAL ASPECTS OF THE PROBLEM OF PREPARATION

It is impossible to consider the problem of internships separately from the other aspects of preparation for clinical psychological practice. When one faces this broader problem, three important and closely related questions present themselves:

1. What are the essential elements en-

[3] Washington: U. S. Government Printing Office, 1944.

tering into adequate preparation?

2. What compromise, if any, should be made between actuality and desirability?

3. Shall preparation be for different levels of practice?

The greater part of this report is an attempt to answer the first question through a consideration of the three constituent aspects of qualification, namely, personal, academic and experiential.

With respect to the second question, we believe that there is general concurrence in our opinion that few clinical psychologists, as they are at present prepared, can, at the end of their instruction period cope adequately with the problems with which they are faced. It is the purpose of this report to present a program which should go far towards remedying the situation for the future. We recognize that the prescribed program may seem ambitious. That it so appears is not due to an unrealistically high aspiration level set by us but rather to the contrast created by the unfortunately low achievement level attained in the field thus far. It would be idle to deny the wide gap between the two. Because of this gap it is likely that some compromise with expediency will have to be made. But that the scheme suggested is essentially what clinical psychology needs in order to attain the first stages of true professional status cannot, we believe, be gainsaid.

The third question raises a serious problem and is, of course, an integral part of the problem of expediency. It is dependent upon the concept which one has of the level of contribution to be expected from the clinical psychologist. It is difficult to see how a clinical psychologist can be taken to mean anything but a person of professional level capable of acting in a consulting rather than merely in a technical capacity. Although a demand for technicians does exist, psychology cannot afford to concern itself too deeply with this peripheral problem at a time when the importance of establishing itself professionally is central. At the present stage of development of the profession and with the current needs in the field, the kind of person to represent and advance clinical psychology most adequately appears to be one who, besides meeting certain basic personality requirements and having the proper breadth of educational background, is competent to carry a triad of responsibilities: diagnosis, research and therapy, at a reasonably high directive and consultative level.

A large number of persons now in the field are below this level. Since there seems to be a continuing demand (in some respects psychology-created) for persons at an assistant or junior level, their preparation should be as adequate as possible and lead naturally into the more advanced preparation. After the standard advanced course of preparation is discussed, some consideration is given in this report to such a program.

Another related need is that of the improvement of the competence of persons already practising, whether they be of junior or senior level. The present report also touches upon this problem.

QUALIFICATIONS—PERSONAL AND ACADEMIC

Personal qualifications

Although the need for a reasonably well-adjusted and attractive personality as the foundation upon which to build an adequately prepared clinical psychologist is generally recognized, it cannot sufficiently be emphasized since it is so frequently forgotten in practice. A more specific enumeration of the requirements in this respect would include the following:

1. Superior intellectual ability and

judgment.
2. Demonstrated industry, originality and resourcefulness.
3. Breadth of cultural background and versatility.
4. Integrity, tact, self-control and discriminating sense of ethical values.
5. Deep interest in psychology, with special interest in clinical psychology; promise of being able to make a worthwhile contribution to its advancement.
6. Demonstrated interest in persons as individuals and not merely as material for manipulation.
7. Insight into one's own personality characteristics and sensitivity to the complexities of motivation.
8. Genuine aptitude for clinical psychology; ability to adopt a "therapeutic" attitude.

At first reading these personal requirements may seem formidable but second thought will indicate their reasonableness for practice in a field which places such heavy demands upon the person's maturity, sensitivity, and knowledge.

From undergraduate days on, students should be encouraged to use their summer holidays and other spare time for the acquisition of experience in fields which bring them into close contact with both ordinary and unusual persons, whether it be in the factory, field, institution or laboratory. Underlying this suggestion is the recognition of the principle that the broader the base of human experience possessed by the clinical psychologist, the greater the value he will derive from his formal preparation and the more adequate his practice.

Academic course.

General Principles:—With respect to the academic program the following general principles appear to us important:

1. The program should be organized and planned in such a manner that there is direction towards a fairly definite goal from the beginning of graduate work and, to some extent, even from undergraduate days on. Although clinical psychology is not so well known and defined as some other fields and, therefore, cannot expect prospective students to be aware of their interest in it early in the undergraduate period, there is good reason for setting up some standards of preparation for this period at least as a rough guide. This should help to lay the ground for increased control of professional preparation in the future.

2. The program should be organized around an integrated combination of academic and field work in which representatives of both groups will have had an opportunity to determine the content of each.

3. The program should not be too rigidly organized since considerable experimentation with respect to persons, background and content is essential for the development of the most adequate program. The considerable progress which stems from such an elastic attitude can be gauged from an examination of the development of the medical and social work professions. The former, particularly, has found that the necessity for establishing rigid detailed requirements in order to enforce proper standards resulted in an inelasticity and uniformity which was quite handicapping in a field going through rapid growth. It should be the aim of psychology to attempt to establish standards in a setting of flexibility and reasonable freedom. In addition to the general grounds for such an approach there must be some latitude to fit the specific needs of the individual and to meet local university require-

ments and regulations.

4. A process of careful discrimination in the choice of content is essential if the program is not to become impossibly broad and dilute. It may be anticipated that considerable pressure will be brought to bear on those organizing programs to include a great variety of subjects and content; almost everything remotely related to the field will undoubtedly be argued for as indispensable. It must constantly be kept in mind that the available time is limited and that to familiarize the student with all the facts and methods of every aspect of clinical psychology, let alone psychology, is impossible. To meet this situation the emphasis of the program should be on principles rather than on technical aspects.

5. The preparation should be basic, that is, directed to the preparation of *clinical* psychologists, rather than specialized towards a particular type of clinical psychologist, for example, the *school* psychologist, *reformatory* psychologist, *hospital* psychologist.

6. Except at the level of elementary courses and such highly standardized courses as physics and chemistry, the philosophy and manner of teaching, as well as the content, are most important. Little of significance, obviously can be surmised from the mere title of a course. Until there is some supervision and evaluation of instructors and instruction as well as of course titles, considerable liberality will have to be shown in this respect. In general, the trend already developing in the direction of the individualization of instruction should be encouraged. As far as possible the formal lecture system should be replaced by small teaching sections, personal conferences between students and instructors and the multiplication of opportunities for independent work.

7. The program of education should be at least as rigorous and extensive as that for the Ph.D. It should include the equivalent of the requirements for the Ph.D. with an additional year of internship.

The academic program will be discussed from the standpoint of three different levels of professional operation: *senior*, *junior*, and *postgraduate*. Main consideration will be given to the first, with some discussion of the latter two as they relate to the senior level preparation.

SENIOR CLINICAL PSYCHOLOGIST LEVEL: Undergraduate Program. The basic undergraduate program should include the following:

1. *Psychology.*—An approximate optimum of twenty semester hours, to consist essentially of the standard courses for undergraduates. (Professional and advanced courses in the field should in general not be open to undergraduates. However, the student must be permitted to take a sufficient number of psychology courses to enable him to acquire a fair acquaintance with the content of the field of psychology.)

2. *Biological (and physical) sciences.*—Approximately twenty semester hours of which the major part should be in biology and the balance in physics and chemistry.

3. *Mathematics and Statistics.* — Approximately nine semester hours in mathematics through introductory calculus; statistics.

4. *Education.*—At least nine semester hours in the fundamentals of educational philosophy and experimental didactics.

5. *Social sciences.* — Approximately twelve semester hours in sociology, anthropology and economics. (Political science may be substituted for the last. The requirements for education and social science might be considered as a

unit and the twenty-one hours be so constituted as to include not less than six hours in education and twelve in social science.)

6. *History of Culture.*—Six semester hours in philosophy, logic, comparative literature, etc.

7. *Languages.*—Reading knowledge of French and German preferably. (Some consideration, however, should be given to languages which may play a greater role in the future, for example, Spanish and Russian.)

The above program is recommended because of its preprofessional nature and includes as little as possible of work which is to be done later at a professional level. The aim of the undergraduate course is to provide the broad cultural and scientific base for the student's work in psychology proper. Courses are included which would help the student to attain some insight into human behavior, an understanding of the biological and social development of the individual and a first acquaintance with methods of collecting and evaluating data.

It must be borne in mind, however, that the undergraduate program cannot be appraised according to credit hours or in relation to specific courses. Each candidate's record must be examined on its merits to see how far it meets the spirit of the background requirements of breadth, good introductory acquaintance with psychology and fair acquaintance with the biological and social sciences. If there is a choice to be made between the latter two groups, it seems reasonable to postpone further study of the social sciences for the graduate period at which time the student is more mature and better able to grapple with its relatively greater uncertainties.

SENIOR LEVEL: Graduate Program. For the professional training period greater specification of content is both possible and desirable. Although the requirements for entrance into the professional course should be left fairly flexible, and inadequacies corrected by conditioning without credit, the course should be organized so as to give a thorough fundamental training in psychology and its applications to the clinical field. It is here, especially, that all suggested courses (many more than can possibly be included) should be scrutinized carefully and rated according to their potential contribution to the preparation of a soundly prepared clinical psychologist. It is very simple to smother the student in a multiplicity of courses in technique and even leave him in the end a badly trained technician. Rather, the stress should be on fewer, well integrated courses which subtly but inevitably leave the student with a sound philosophy — a foundation on which he can build special techniques as he needs them.

The professional program is viewed as one extending over four years (one year of which is to consist of an internship) and leading to a doctorate. It is expected that the program will be as exacting as that ordinarily required at present for the Ph.D. Although there is some analogy with the medical training program it is intended that the training will meet the standards of the highest quality of graduate study, namely, study which encourages initiative and individualization with the aim of developing more self-reliance than ordinarily results from the rather narrowly prescribed medical course.

The following program is presented in some detail because the Committee believes that only from the examination of several such concrete programs will it be possible to arrive at one which will be generally acceptable. The Committee recognizes that it is only one of several equally satisfactory ones which might

be suggested.

First Year. The primary purpose of the first year of study is to lay the systematic foundation of knowledge of psychology and the achievement of the degree of acquaintance with physiological sciences needed for professional clinical work. To reach this goal the following program is suggested:[4]

Courses	Semester Hours
1. General Psychology — (Fundamental theory and integration of scientific findings; history and schools of thought)	6
2. Dynamic Psychology I — (Fundamental theories of personality, motivation and dynamics of normal and abnormal behavior)	3
3. Experimental Clinical and Dynamic Psychology I—Conferences and laboratory (Theory and design of experiments on personality characteristics and dynamics; critical analysis of published studies; application of experimental methods to actual problems in the clinical field)	3
4. Developmental Psychology — (Fundamental theories of genetic development, child, adolescent and adult psychology and individual differences)	6
5. Theory and Practice of Psychological Tests and Measurements I—Lectures and clinical practice (Theory of tests and test construction; familiarity with representative tests of intelligence, higher thought processes, achievement, sensory and motor abilities, etc.)	3
6. Physiological Sciences — lectures and demonstrations (Special aspects of physiology and anatomy: especially neurophysiology; neuroanatomy, autonomic nervous system, endocrinology, etc.)	6
7. Advanced Statistics and Quantitative Methods — (Special analytic methods: factors, variance, etc.; mathematical analysis and treatment of data)	3

[4] The semester hours indicated are not intended to be taken rigidly: they are offered as suggestions to indicate relative weighting.

Second Year. The program of the second year of graduate work is mainly directed at providing the student with the necessary background in the experimental, psychometric and therapeutic approaches to the problems of clinical psychology. Although a certain amount of teaching may still be carried in the form of lectures the major emphasis is on direct contact with patients, clients or other subjects, either in the psychometric or in the experimental setting. Practicum courses and clerkships in the form of assistantships in different clinical settings are essential elements of this year's program. From the standpoint of pedagogic technique the participative, rather than the didactic, method should be especially emphasized during this year. The actual courses which should comprise the program are as follows:

Courses	Semester Hours
1. Dynamic Psychology II — (Continuation with advanced aspects of Dynamic Psychology I)	3
2. Experimental Clinical and Dynamic Psychology II—Conferences and laboratory (Continuation with more advanced aspects of Experimental Clin-	

ical and Dynamic Psychology I) 3

3. Theory and Practice of Psychological Tests and Measurements II — Lectures and clinical practice (Continuation of Theory and Pratice of Psychological Tests and Measurements I. Practice testing with a variety of types of subjects and problems: Personality and behavior difficulties, vocational and educational, special abilities and disabilities, normal, feeble-minded, neurotic, psychotic, etc., through short practicums and clinical clerkships) 6
4. Theory and Practice of Projective Devices-Lectures and clinical practice (Training in a variety of settings similar to above) 3
5. Therapeutic Theory and Methods—Lectures and discussions (Introductory course in therapy and counselling; methods and techniques; viewpoints; evaluation of results; elementary practice where indicated) 6
6. Methods of Case Study and Analysis—Lectures and conferences (Technique of anamnesis, interviewing; diagnosis and analysis of cases; planning of disposition and treatment) 3
7. Introduction to Clinical Medicine — Lectures (Introductory course in clinical medicine similar to that given to medical social workers) 3
8. Educational and Vocational Guidance Techniques — Lectures (Methods of evaluating interests and aptitudes; vocational and educational counselling) 3

Although there is some inevitable overlapping in the above courses, this is not necessarily to be considered a disadvantage. The different settings in which these experiences occur should serve to provide the student with a fuller and richer background. It will be noted that the systematic dynamic, the experimental dynamic and the tests and measurements courses run concurrently. The advantage of such a procedure is that it permits a greater integration of the systematic and experimental approaches and also starts the student off in the first year of graduate work with an experimental attitude and an emphasis on the relationship between the theoretical and concrete which is highly desirable for his further development.

During this year, too, it is most desirable that the student do the preliminary work on his dissertation, at least to the point of setting the problem with the faculty. The dissertation presents something of an administrative problem in the double setting of university and internship center. However, there is no reason why it cannot be solved satisfactorily. Since the project should preferably involve a fundamental principle related to clinical psychology, it would ordinarily employ both normal and clinical material. In this case the work could be done both at the university and at the training center. If the work is started at the university, it might be used to meet the requirements of the Experimental Clinical and Dynamic Psychology course which the candidate will be taking during this year. Supervision, on the basis of mutual consultation, should come from both sources.

Third Year. This is to consist of an internship which is discussed in considerable detail in a later section.

Fourth Year. It is the general belief of the Committee that the third year spent in an internship and the fourth in a final year at the university is the most desirable arrangement.

The advantages of this proposal are many: (1) It enables the student to complete the analytic and final work on his dissertation at the university. (2) It permits the final integration of the experiences acquired during the internship with the theoretical principles emphasized by the university. (3) The return of graduate students with internship background to the university should have some influence in integrating the university and the internship center. (It might also serve as a reciprocating educational influence upon the nonclinical university group, both students and instructors). (4) It places the student geographically close to the agency which already has an established placement service. This is of considerable importance, since institutions are ordinarily not in so good a position to be of help to their students in job placement.

The program of the fourth year should be quite elastic and would probably include most of the following:

1. Final work on dissertation.
2. Cross-discipline seminars (attended by representatives of psychology, anthropology, sociology, psychiatry, etc.) which devote themselves to the place of psychology among the sciences concerned with the adjustment problems of the individual and the group. The purpose of these seminars should be to integrate the major principles of previous study and point out the broader implications of the course of instruction for the personal and social scenes.
3. Seminar on professional problems —standards, ethics, etc.
4. Additional courses in psychology as needed to round out the individual student's program.
5. Additional courses in related fields as needed to round out the individual student's program.

The above, then, is the recommended program for the senior clinical psychologist, a program extending over a four-year period (based on a specified minimum undergraduate course) — three graduate academic years and one year of internship.

There are two related problems, namely, instruction at the junior and at the postgraduate levels, which require detailed consideration. In the present report, however, it seems advisable to limit the discussion to the senior level of preparation and merely to offer the following suggestions with respect to the other two in order to indicate their relationship to the former.

JUNIOR CLINICAL PSYCHOLOGIST LEVEL: As has already been stated, certain conditions exist and will probably continue to exist for a time which make desirable the establishment of a junior grade clinical psychologist, one which falls considerably short of the preparation outlined above as desirable. Within the limits set, however, it is important to see to it that the program should be as adequate as possible.

There appears to be no reason why the personality requirements suggested for the senior grade should be substantially changed, except that less in the way of general maturity and general experiential background might be acceptable. The undergraduate program, too, should remain essentially as described. It is in the graduate academic sphere that the major cut must be made: instead of the four-year program, a two-year program, one year of which consists of an internship, is recommended.

First Year. The purpose of the first year is to combine absolutely essential technical education with the maximum

of systematic psychology so as to give the student some common background of knowledge with those of his colleagues who take the more extensive course. The content of the courses should be the same or essentially the same as those given in the advanced program. The discussion of course details found in the senior program may here be referred to.

Course	Semester Hours
1. General Psychology	6
2. Dynamic Psychology	6
3. Developmental Psychology	6
4. Theory and Practice of Psychological Tests and Measurements	6
5. Theory and Practice of Projective Devices	3
6. Educational and Vocational Guidance Techniques	3

Second Year.—The second year is to consist of the internship to be described in a later section. In general the instruction would be similar in content to that of the advanced course, with perhaps some shifts in the relative emphases placed on the various aspects.

POST-GRADUATE LEVEL: Because of the constant advances in the field, provision should be made for the postgraduate education of practitioners to keep them abreast of these developments. Insofar as this kind of information can be imparted in university settings it would appear to be the function of such institutions to provide the necessary courses during the summer periods and at other times convenient to persons engaged in the full-time practice of professional psychology. There may be certain aspects of "refresher" and other postgraduate instruction which are more properly to be obtained at internship institutions. Arrangements should be made for summer or other short-time internships and "institutes" at such places. There should be a considerable demand for such opportunities in the postwar period.

QUALIFICATIONS—EXPERIENTIAL (INTERNSHIP)

General principles

Since the Committee's report as a whole is oriented to this section the nature and content of internship education and experience will be presented more specifically and in greater detail than the university aspects of the program. Even so, because of the variety of types of institutions which may serve as internship centers, the program necessarily limits itself to the more general principles of preparation. The program as outlined is relatively ambitious and probably practical at present for relatively few institutions. But it is essential that the goals towards which such a program is oriented be set sufficiently high to permit the attainment of reasonable professional standards. Too much concern about compromising with the actualities of the situation can result in nothing less than stultification.

What are the aims of a psychological internship? Underlying all of its aims is the fundamental principle that the knowledge essential to the practice of psychology cannot be obtained solely from books, lectures, or any other devices which merely provide information *about* people. Rather, experience *with* people is held to be essential if the student is to acquire a proper perspective and the ability to apply the scientific facts which he has accumulated. Before he can become a competent practitioner, the student must become sensitive to the various relevant aspects of the person under study and learn to consider him as an individual. Because of the recognition of this need, the clinical clerkships and the internship have been made integral parts of the train-

ing program.

The major function of the internship is to provide practical experience of gradually increasing complexity under close and competent supervision. The building up of an apperceptive mass of experience which gives concrete meaning to general principles can be attained only through volume of contact with actual clinical problems. The program should provide the student with a broad base for later specialization by throwing him into full-time contact with human clinical material, contact of a much more intensive kind than he can possibly have during the clinical clerkships of the second year. This aspect of the instruction gains its value from being organized around the case material to be found in the institution, that is, the person rather than the condition is made the center of interest. Not only is the person seen in cross-section but it is possible to follow him longitudinally, as the psychological processes develop and unfold.

Content of experience

The content of the internship program comprises two major categories of activity: that involving contact with the institution population[5] and that involving the acquisition of experience in the administrative sphere. The first is by far the more important but the latter is a not unessential part of the preparation.

[5] By "institution" is meant any organized setup which deals with problems falling within the realm of the clinical psychologist. The population may consist of patients, clients, inmates, and so forth. If we use the term "patient" in this report more frequently than others, it is because it more generally describes the type of person found in the institutions under consideration. Since the internship has been most highly developed within the setting of the psychiatric hospital and the feeble-minded school the discussion frequently uses these settings for exemplification. This carries no implications, however, as to preference for any one type of institution.

Work with institution population

In order to emphasize the central importance of experience with the institution population this has been made the basis of the discussion which follows. The conventional classification of internship activities into such categories as clinical psychometrics, research, courses and conferences and therapeutics, has been subordinated to a classification based on the nature of such experience. Contact with patients is of two types: *direct*, that is, the acquisition of information from the patient by the investigator himself; *indirect*, that is, the acquisition of information from and about the patient through other investigators and sources.

In direct contact with patients the main avenues of approach are those concerned with *diagnosis* and those concerned with *disposition*. Each of these requires separate and detailed consideration

A most important aspect of the education of the intern is the instruction he receives in the use of *diagnostic procedures*, the procedures directed at acquiring knowledge about the origin and nature of the condition(s) under investigation. Under this heading is included a great variety of techniques of different levels of objectivity and degrees of complexity. Of particular importance are the following:

1. History-taking — Actual experience in obtaining anamnestic data, both personal and family, from the patient himself (and from informants and records).

2. Interviews—Actual experience in interviewing a variety of types of persons to complement the didactic course in interviewing techniques which the student has had as part of his graduate course. Since the interview is a systematic psychological examination only subjectively standardized and since the

technique of interviewing is a difficult instructional topic the supervision of this branch of activity should be in the hands of a psychologist skilled in both the technical and theoretical aspects of the subject.

3. Clinical Psychometrics — Practice, under supervision, in the administration, interpretation and reporting of psychometric studies on a large selection of subjects of different types. This should involve instruction in the selection of schedules to meet specific diagnostic problems. The reports should not be limited to mere statements of results but should always include interpretations, and, where indicated by the findings, recommendations. Even if the latter are not called for specifically, the student is to be encouraged to provide these in order to orient him to a consultant's rather than to a technician's point of view.

An equally important aspect of his direct contact with patients is that of *disposition*, namely, what is to be done about the presenting problem on the basis of the findings obtained through the use of the various diagnostic procedures. The worker himself may be directly concerned with disposition or he may act only in the role of consultant. In the former, the direct execution of the implications of the diagnosis may be at a technician level, at a therapeutic aid level, or at a rather complex professional therapeutic level. In the last, when he acts as consultant, the recommendations made by the intern, which may be part of a much larger set of recommendations, are carried out by someone else. This person may be at any of the levels of skill mentioned before. In a case of this kind the intern should have the opportunity to find out how effective are the actions taken with respect to the recommendations he has made, that is, he should be able to follow the case through written or oral reports.

The problem raised by the first type of disposition, that of direct therapy, is one which has offered considerable difficulty to psychology. Adequate consideration of the problem is beyond the scope of this report. It should be the task of a special committee of the American Psychological Association (perhaps of the newly organized Divisions of Abnormal Psychology and Psychotherapy and of Clinical Psychology) to consider the various aspects of the topic and to meet with representatives of the other disciplines involved in order to delimit the reasonable field of therapy which should be open to psychologists. For the present, this Committee suports the thesis that therapy in some form is a necessary part of the training of the clinical psychologist and that this therapy must go beyond the mere treatment of special educational disabilities.

All of the direct contact with patients just discussed lends itself to two different types of approach, each with a different end in view. The first is the *service* approach, that is, the study of the patient with the aim of solving his particular problem at the time, without regard for the general implications involved. Most of the work which is done by the intern is at this level. The second is the *research* approach, namely, the study of the patient not only for himself but for the general implications which his case has for psychology. This may be based on a very thorough study of him as an individual case or as a unit in a series of cases. The research approach is an essential part of the background of the clinical psychologist and a considerable part of the intern's time, perhaps up to one third, should be devoted to the study of some problem on which he can accumulate a body of data during the course of the year's in-

ternship. This material may very well be used for a dissertation, as already discussed in an earlier section.

In addition to the direct contact with patients, a considerable part of the instruction which the student receives involves only *indirect* contact with patients, that is, is *about* patients with whom he is not directly associated. This involves experience of three kinds: (1) individual—about a particular patient; (2) general—about classes of patients and (3) technical—about methods used with patients.

Indirect contacts with *individual* subjects may arise either within the setting of the psychology department or outside of the department. In the former are included conferences and department staff meetings discussing diagnostic studies and the therapy of cases carried on by other members of the department.

In this type of relationship with patients the extra-departmental contributions are usually the more extensive. A major contribution to the student's education is the knowledge which he acquires from regular attendance at the institution staff meetings which consider patients for initial orientation, for diagnosis, for disposition, or for special pedagogic purposes. At these, the student has the opportunity of becoming acquainted with the contribution made towards the understanding of a case by the various disciplines—psychiatry, social work, education, occupational therapy, nursing, psychology—and the manner in which the various contributions are integrated. Besides these meetings, there may be special departmental conferences on particular cases, for example, the psychological with the psychiatric or the social work departments. Ward rounds with the psychiatrist, observation of classes with the teacher, field trips with the social worker are other worthwhile types of interdepartmental relationships. The student should have available to him the complete institution case records of a patient and should be encouraged to consult them whenever he becomes interested in a case. In institutions with medicopathological facilities, autopsies and clinicopathological conferences help to give the psychology student quite different points of view about the patient. Thus in the case of the latter he is confronted with a technique which is of considerable benefit to him in emphasizing the importance of careful diagnosis and differential diagnosis. It is in these extradepartmental relationships, too, that the intern learns some of the principles involved in the appropriate referral of cases to consulting colleagues.

Contact of the *general* kind, that is, about classes of subjects, is obtained by the intern both in and out of the psychology department through courses and seminars in psychiatry, psychosomatics, neurophysiology, re-education and rehabilitation, special defects and remedial instruction, or vocational guidance, and in the approaches to the problems of clinical psychology and psychopathology from the standpoint of particular disciplines, for example, social work, psychiatry, internal medicine, education, pastoral work. The special emphasis of these courses should be on the use of the available human material of the institution, otherwise they would lose their peculiar character and could as well be given in the academic setting.

Another aspect of this indirect contact with patients is the training which is provided in courses on technical procedures. Here, too, the emphasis should be on the exemplification of the techniques by case material from the institution. (It is at present unfortunately true that in some cases institutions are

called upon to provide instruction along lines which are definitely within the province of the university. It is a major aim of the course here outlined to eliminate this misuse of function.)

In some respects reports on journal articles and reports given at professional meetings which are based on patient material fall into this class of indirect contact with patients—in this case, of course, patients from other institutions.

An important point which administrators of internship centers must keep in mind is the necessity for constantly leavening the deviant dough, their predominant concern, with normal material. In order to prevent the psychology student from losing his sense of proportion and the strength which is his because of the dependence he has been trained to place on soundly based norms, it is desirable that his opportunities for investigating normal people, by the same techniques which he uses with deviants, be multiplied. A further reason for concerning himself with the study of the normal person is the need for learning as much as possible about the factors which go to make up normality as well as those which go to make up deviation. A setting in which both are studied together would seem to be the most productive for arriving at the true differences.

Work with administrative aspects

There is another aspect of experience which, though not directly connected with patients, is still important. We refer to the administrative aspects of the institutional psychology department's activity and the mechanics of relationships with colleagues, superiors, members of other disciplines and the institutional administration.

For this purpose, a manual which covers the standard practice developed in the department through the course of experience is of considerable help in orienting the new intern and is a constant source of general aid for the older one. Besides the regulations resulting from the accumulated experience with regard to department mechanics, suggestions arising from experience with interdepartmental relationships should also be explicitly presented in such a volume.

In the intradepartmental sphere each intern should take on some of the responsibility for departmental functions. This may be of the nature of assisting in the supervision of the other interns (rotated regularly among the group), the teaching of students who are serving clinical clerkships, and the care of the departmental records of patients. In connection with these records, he should be encouraged to keep a daily log of his activities, particularly about patients whom he has examined, in order to be able to determine for himself where his experience needs amplification and supplementation. Part of his responsibility should be one or more of the less professional tasks which are so numerous in any psychological setup, such as caring for supplies, equipment, or the department library.

Outside the department proper there is an effective device for early orientation to the institution in its most important aspect, namely, in the matter of direct relationship with its clients. In hospitals and similar institutions the intern, for a period of approximately a week during the early period of his internship, may be placed on the wards as an attendant charged with the usual attendant's duties. There is perhaps no more satisfactory way of establishing quite early in the internship period a sympathetic attitude towards the patients and providing an understanding of the problems of the ward and nursing personnel, a group with whom the student will have many close contacts.

In certain other institutions a teaching position in the educational or therapy departments would serve the same purpose, although the time to be spent in this work would probably have to be longer than that spent in the comparable work at the hospital. Early establishment of acquaintance and friendly relations with the members of the staff representing the other disciplines, especially the students in the other groups, should be encouraged. Such close contact can make a considerable contribution to growth. Students should be required to bring the results of their study for discussion to the person representing an associated discipline who has been most closely concerned with the case. In fact, persons from the other disciplines should be called on whenever possible to help in the training of the student, a policy which the psychology graduate faculty might profitably adopt.

It does not appear necessary to extend this section further. The point which we have emphasized is obvious: the importance of developing the students' ability to handle the mechanics of his relationships with persons within and without the department.

Manner of instruction

Although some aspects of the instruction process per se have, either explicitly or implicitly, already been considered this seems the appropriate point to consider the problem specifically.

The fundamental purpose which must lie behind the process of instruction of the intern is the gradual development in him of a sense of a responsibility and self-reliance in handling clinical problems. The whole program should be organized to provide the student with increasing responsibilities commensurate with his growth in the ability to accept them. This requires constant knowledge by the supervisor of the state of the student's progress; absentee or routinized supervision cannot achieve such an end. At the start of the course of internship the supervision should be close and the supervisor should assure himself of the ability of the student to handle even the simplest procedures. As the student shows increasing competence the supervision should be proportionately reduced and greater responsibility placed on the students to supervise each other with only a final check by the supervisor. The latter should, however, always be available for consultation.

The importance of competent supervision cannot be overemphasized and any institution which accepts the responsibility of providing an internship program must recognize this as one of its most important aspects. It is unnecessary to go into detail with respect to the mechanics of good supervision. It is sufficient merely to point out the need for limiting supervision to what is required at the particular time, to the need for encouraging independence in the supervised and to the need for insisting on high standards.

Although in some ways the psychological intern may congratulate himself on the fact that he does not have many of the odd and routine responsibilities which fall to the medical intern in the clinical setting, it must be recognized that the medical intern grows considerably in resourcefulness and self-reliance from the demands which are made upon him. Some thought will have to be given to securing for the psychological intern opportunities for the exercise of similar responsibilities. However, constant vigilance must be exercised to keep narrow service responsibilities secondary to educational opportunities, a danger particularly apt to occur in institutions not thoroughly organized on an educational basis. The aim in general should be to give a type of in-

struction which by the end of the year has provided the student with the various types of responsibilities, both in and out of the department, carried by the staff members.

Another important aspect of the internship is its type of organization. For the present it is probably wise for psychology not to concern itself with providing both internships (instruction for general application) and residencies (instruction for specialities). The internship here considered is a combination of both of these as the terms are used in medical circles, with emphasis on the former. Concern with the problem of specialization within clinical psychology may come later, only after a fundamental program of a broad kind has been well established.

There are several forms of field work which are frequently incorrectly subsumed under the heading of "internship." For our purposes it will help to clarify the issues if we think of field work (and this does not include practicums or clinical clerkships) as falling into four types:

Internships (residence appointments): Full-time and part-time.

Externships (nonresidence appointments): Full-time and part-time.

In the discussion thus far the assumption has been that the internship would come in the third year of training and would consist of a full year block (consecutive plan) devoted solely to the internship. There are advocates of another system who would have the internship run concurrently with the second and third years of graduate work, part of the time being spent in courses at the university and part of the time being spent at the internship center. (There are, of course, externships of the same two kinds.) Each has its conveniences, inconveniences, advantages and disadvantages. A full consideration of these leaves the Committee with the judgment that the block system, especially that involving residence, is to be preferred. Its relative advantages may be summarized as follows:

1. It offers an opportunity for *real* acquaintance with the aims, principles, and techniques of clinical psychology, an opportunity to get not only the "feel" and the "know" of psychology, but the "feel" of other fields, as well, through both professional and personal contacts.

2. It is unsurpassable trying-ground for intellectual and personality fitness for clinical work. (The special strains which institutional work and living place on the person offer both the supervisor and the student an unusual opportunity for the evaluation of interest and fitness for this work.)

3. It offers the student an opportunity to get away from the academic atmosphere for an extended period, usually a very desirable and much appreciated opportunity after some eighteen successive years of academic work.

4. It affords experience in carrying a full-time position which has many similarities to that in which the intern is likely to work after completion of the full course.

5. It encourages the development of resourcefulness and independence of thinking in integrating his own experiences with his academic background.

6. It offers an opportunity for consistent and full-time occupation with the clinical field. There is not, in contrast with part-time internships and externships, the confusion and strain which come with shifting back and forth from the clinical to the academic settings. The gain in wholeheartedness of occupation would appear to more than balance whatever may be gained from continued contact with the university.

7. The choice of institution is not

limited by accessibility, as it is in a part-time program. This permits the use of desirable institutions at some distance from the universities.

8. It permits (as against short-term internships or externships) the more detailed study of the unfolding and development of a case—the kind of opportunity which psychologists in ordinary settings generally do not have.

9. It permits twenty-four hour residence in an atmosphere permeated with a psychology of a living kind and appears to have more potentiality for the maturation of the personality than almost any other experience ordinarily available to the psychologist.

The full-time externship has, if in a somewhat attenuated form, the same advantages except for the last mentioned and the lack of personality testing which institutional living imposes. It must be recognized that certain types of field work can be carried on in institutional setups which can provide externships only, namely, child and adult guidance clinics, juvenile courts, university psychological clinics and mental hygiene clinics. In psychiatric hospitals, schools for special groups (feeble-minded, epileptic, and so forth), general hospitals and prisons the internship arrangement is the usual and preferable one.

The part-time arrangement, whether in the form of internship or externship, impresses the Committee as less desirable. The great advantage it has is the opportunity which it affords for integrating more closely the work of the university and the internship center. (It is assumed of course that the student carries a concurrent program at the university.) Otherwise, most of the gains which come from full-time occupation with clinical material are lost. Ways of achieving for the full-time setting the advantage which the part-time arrangement has, will be considered in a later section.

From the point of view of the institution and the internship supervisor authority there is little question about the greater desirability of the block plan. Even the best of part-time students offer a considerable problem to administrators, because it is not possible to assign to them stated responsibilities in a setting where there is extreme difficulty in keeping programs organized on a rigid schedule. From the point of view of the student he misses the advantages listed earlier, advantages which he may never appreciate unless he has actually experienced them.

Another question which arises is that of the relative merits of the concentrated (straight) as opposed to the rotating internship. For the present it seems preferable to concentrate on the straight internship, if for no other reason than the much greater simplicity of its organizational aspects. When, at a later date, the time arrives for the consideration of more extended internships, the advisability of setting up the rotating type of internship might be considered. Except for those institutions with limited facilities and types of problems, a well-organized teaching institution has more than enough to keep an intern profitably occupied for a year without rotation. There is danger of a considerable loss of time and unprofitable occupation with the warming-up and tapering-off stages in a program of rotation. This is especially true in psychology, since rotation here would really be "revolution," in the sense of the geographical shifts involved. The situation is likely to be quite different from that obtaining in medicine, in which rotation is, with few exceptions, from service to service within the same institution; in psychology, rotation would actually mean transfer from institution to insti-

tution, with all the complications which arise from constant reorientation to different physical setups, different personnel and professional problems. Even in the relatively satisfactory medical situation, the limitations of rotation have been found by medical training supervisors to be numerous. There are, however, many distinct advantages to such a system and considerable encouragement should be given to those experimenting with programs of this kind, especially those which involve two-year internships.

Numerous objections to certain types of institutions as internship centers have been raised. Some of the points made are that the prevalence of cases with poor prognosis is discouraging to the student, that the types of patients are limited, that the institution is frequently isolated, that the student cannot see a patient through from the beginning to the end of the contact, that there are certain limitations to the contacts which they can establish with other specialists, such as teachers, physicians, and probation workers. These weaknesses, although sometimes present in institutions, are not inherent to institutional situations and when present can frequently be eliminated. These are important considerations, however, and should be kept in mind when institutions for internships are being selected.

In all of these problems must be recognized the inevitable differences which exist among institutions similar to the differences to be found among universities. Such differences must, of course, be allowed for in organizing programs. The aim of these programs should be the setting of standards rather than the achievement of rigid standardization and regimentation.

Non-educational aspects of the internship

The internship has several non-educational aspects which deserve consideration.

The outstanding problem in this respect is that of *remuneration*. With the growing number of internships and in line with developments in the medical field there is an increasing demand by interns for monetary allowances in addition to the food and lodging provided. Fundamentally, the principle that interns (in contradistinction to residents) should not expect to be paid for an educational experience seems reasonable, especially since they already get the equivalent of a good-sized fellowship in the maintenance provided and in the remitted tuition. If the institution recognizes and carries out its educational responsibilities, then the matter of monetary return becomes secondary. However, too frequently, there is considerable justification for this demand, especially when the services given by the intern are greater than the educational opportunities provided by the institution. Such settings are, of course, not under discussion in the program called for here. Still, we are in general agreement with the point of view expressed by the Commission on Graduate Medical Education. There are few persons with adequate finances to carry them through the four years of graduate school and internship. Those who are so limited cannot easily plan to work on the side during the internship year to keep themselves in clothes, tobacco, and other minor necessities. The peace of mind and singleness of purpose which the student attains when he does not have to call on his family or friends for help in these small things makes it desirable for institutions to provide nominal allowances to interns. It should be emphasized, however, that in no way is the stipend to be considered a salary. The Committee is in favor of such allowances and recommends their adop-

tion as reasonable.

It is expected that the institution will do all it can to provide *housing* facilities which are not overcrowded and which are well maintained from the point of view of attractiveness and cleanliness. The *food* should be ample and wholesome. However, even the best of institutional accommodations are bound to have their drawbacks, and prospective interns should be made aware of these at the time of their appointment. The institution should accept as one of its responsibilities the provision of some *recreational* and *cultural* facilities. The *health* of the intern should be a concern of the institution as part of the health program for the institution as a whole.

Institutional setup

Which kind of institution is to be preferred for the internship? Careful consideration of the problem leaves the Committee with the opinion that it is not the type of institution which should be the determining factor but rather the quality of the particular institution. Given adequate facilities in psychology and in personnel representing the different disciplines (these should not necessarily be limited to psychiatry and social work) and adequate physical plant and equipment, then the question which calls for an answer is: How much and how broad a knowledge of clinical psychology can be obtained from contact with the institution population? Obviously certain types of institutions offer more varied material than others. Thus, in one respect, an active psychiatric hospital offers considerably more in the way of understanding of the problems of human motivation than does a school for the feeble-minded. On the other hand, such a school offers certain types of data, for example, those related to heredity, not generally available in the psychiatric hospital. "Good" institutions of any type are better than poor institutions of what might be considered a favored type. It is clear, also, that within the same type of institution those having the more varied facilities would be preferable as an internship center.

Another criterion to be used in evaluating an institution is the availability of normal material. The intern should be constantly encouraged to examine and study normal persons with the same techniques he uses for the institution population. He should also, of course, be prepared to use normal controls for any research he carries out with the institution population.

INTEGRATION OF ACADEMIC AND INTERNSHIP PROGRAM

After what has already been said at different points in this report it would seem unnecessary to discuss further the importance of integrating the two parts of the internship program. At this point, however, we are concerned with the techniques of implementation which require additional consideration. The problem of integration arises with respect to four aspects: (1) selection and appointment, (2) content, (3) supervision, and (4) accrediting and certification.

Methods of selection and appointment

The personal and background criteria set up as desirable for students have been presented in another section of this report. It is assumed that the responsible persons at the universities will bear these in mind in selecting students for the course of training, paying particular attention to the characteristics suggested as important as they manifest themselves in the clinical work and in the laboratory research which comes under their supervision. Besides rigor-

ous selection at the time of entrance into graduate work there should be a process of progressive selection throughout the four years, with guidance in the correction of minor defects and severance from the program when the latter appears advisable. Both the university and the internship center should have reciprocal responsibilities in these respects.

An objective scholarship examination, such as the Carnegie General Record Examination and Advanced Subject Tests, and an objective comprehensive clinical psychology examination, sponsored by the American Psychological Association, should be given to candidates. The development of relatively standard aptitude tests for clinical psychology should be encouraged and, when proven valuable, used for selection purposes. Examinations such as those mentioned should be employed particularly at the two major strategic points in the professional program, namely, prior to entry into graduate work and prior to entry into the internship.

The final selection for the internship should be based on personal recommendations from the university faculty, recommendations from other sources, the results of the objective examinations, the impressions from a personal interview (whenever this is possible it should be arranged) and the transcript of grades. A relatively complete standard form for selection and recommendation should also be adopted for general use by both types of institutions. At this stage of the process it is assumed that only a select group would be available for final selection by the institution. On the basis of these fairly complete data the particular institution would be in a position to make a selection in line with its special nature and its peculiar needs and requirements with respect to both personality and background.

In order to avoid the problems which arise from duplication of applications, delayed advisement of rejection, appointment and acceptance and the numerous other complications of a similar sort, some system of centralization of internship applications should be arranged.

Although implementation would be somewhat complicated, it appears to be good policy to discourage the concentration of students from one school at a particular internship center. A distribution in point of origin of students at an internship center increases the profit to be obtained by individual interns from their period of study and discourages the inbreeding which is so common in American psychology.

Considerable effectiveness can be achieved by both agencies in the problem of the placement of graduates through the pooling of resources. Some thought should be given to the possibility of delegating this function to the Office of Psychological Personnel or to the Central Office of the reorganized American Psychological Association. A related problem of major importance is the establishment by some body of minimum salary scales which are appropriate for persons who have completed their course at the different levels described in this report.

Content

For the program to be most effective the content of its two aspects must be well integrated. In order to achieve this end some arrangement for reciprocal visits and conferences between the staffs must be made to discuss such problems as the points of view to be emphasized, the techniques of teaching, and the avoidance of overlap. It is most important for the instructors at each place to know the general content of the teaching at the other. Such mutual ac-

quaintance should go far towards making easier the transition to the internship center and back to the university.

Supervision

In the matter of supervision an integrated program must also be achieved. For the major part of the student activity at the internship center the supervisor there must obviously be left responsible. If the candidate is to use his available research time at the institution for work on his dissertation, however, then a very close relationship and agreement as to the division of supervisor responsibilities must be achieved by the two groups. The appointment by the university of several of its instructors, on a rotating basis, to act as field supervisors should be considered. It would be their responsibility to hold scheduled conferences with the interns in order to maintain contact with them and help supervise their dissertations.

All of these aspects requiring integration point to the obvious need for a combined responsibility in setting and maintaining standards. Such unification can only be achieved by accepting the internship center as an institution of comparable status with the university. This can be achieved by interchange of personnel, joint conferences, interchange of student visits, etc. There is no better way of achieving integration than through an interchange of staffs. The teaching staff of the university should be encouraged to spend summers or other periods at the institution on guest appointments. The staff of the institution should be given temporary full-time or permanent part-time appointments at the university on a consultant or lectureship basis, an arrangement which is generally quite practicable and does not become too involved in problems of university administration.

ACCREDITING AND CERTIFICATION

A step which necessarily follows upon the organization of a program such as the one outlined is that of accrediting and certification, namely, the official recognition of the adequacy of those involved—the student, the university, the internship center.

Individual

At the various levels of individual advancement some appropriate symbols of achievement seem necessary. The following are suggested:

1. Master's degree in clinical psychology after the second year of graduate work for the person taking the senior clinical psychologist course. (The two-year requirement should eliminate the necessity for a master's thesis. However, if this is still considered desirable by the university then provision for this will have to be made. Because of the different fixed university practices with respect to the master's degree it is likely that this degree as a symbol of professional status will turn out to be unsatisfactory for the purpose intended. If so, a certificate of junior status awarded at the end of the internship period would have to be provided for the persons taking the junior course.)

2. Doctor's degree following the four-year course of professional preparation. Although there are some professional groups, notably the legal, which practice on the basis of a bachelor's degree, there are various considerations which make it doubtful if anything less than a doctor's degree would be satisfactory for the practice of clinical psychology. Some question might be raised as to the kind of doctor's degree to be awarded. Although there are some reasons for adhering to the Ph.D. degree, the argu-

ments for a truly professional degree, for example, a Ps.D., are many, and should be given careful consideration. Some thought should also be given to to the establishment of a standard internship certificate to be awarded at the end of the internship period.

3. Membership in the professional association of the group. The two grades of membership provided by the new requirements of the reorganized American Psychological Association meet the needs of the situation.

4. Closely linked with the problem of study beyond the doctor's degree is that of the establishment of an "American Board of Clinical Psychology," appointed from among the leaders in the field, by the professional association. This would have as its function the certification of candidates who after a definite number of years of actual experience have passed examinations in stated aspects of the field of clinical psychology. Diplomas or certificates of the Board would serve as evidence of competence in the actual practice of clinical psychology. Such a plan would be similar in many respects to the specialty boards now to be found in the field of medicine.

These steps in voluntary certification and approval would logically precede any attempts at governmental certification and licensing. The latter, however, should be kept in mind as a step desirable in the future.

University

The schools should be judged on their ability to meet the requirements set forth earlier in the discussion of the program. Not only the formal meeting of standards with respect to the courses given but the actual quality of the courses, as it relates both to content and instruction, should be carefully scrutinized. Perhaps this could be done most effectively through the Committees on Graduate Education of the American Psychological Association and the American Association for Applied Psychology. The national approving body should rate schools on the basis of how closely they meet the recommended standards.

Internship centers

The centers for internships should be given the same careful scrutiny as the schools. Standards as to content, quality and amount of supervision, facilities (personnel, clinical, library, teaching), living arrangements, and so forth, should all be carefully set up. The Joint Committee on Standards for Psychological Service Centers of the American Psychological Association and the American Association for Applied Psychology might be given this responsibility for it appears to fall distinctly within its sphere.

RECOMMENDATIONS

In view of the considerations presented in the accompanying report, your Subcommittee on Graduate Internship Training respectfully recommends to the Committee on Graduate and Professional Training of the American Psychological Association and the American Association for Applied Psychology:

1. That you endorse the attached report in principle.
2. That you recommend approval of the report by the American Psychological Association at its next annual meeting.
3. That you recommend publication of this longer report in the JOURNAL OF CONSULTING PSYCHOLOGY.
4. That you request the appointment by the American Psychological Association of a *Committee on Professional Training in Clinical*

Psychology to consist of representatives both from universities and internship centers, this Committee to be empowered to:

a) Establish contact with universities recommended by your two Committees.

b) Establish contact with internship centers recommended by the Committee on Standards for Psychological Service Centers.

c) Draw up a tentative program for submission to those institutions evincing an interest in becoming associated with a program of professional training of the general nature of that outlined in the present report.

d) Call a meeting of representatives of these institutions for the detailed consideration of such a program, both as to its content and execution.

e) Submit the final program worked out by this group to the American Psychological Association for approval as an experimental program.

Respectfully submitted,

R. A. BROTEMARKLE
E. A. DOLL
E. F. KINDER
B. V. MOORE
S. SMITH
D. SHAKOW, *Chairman*

BOOK REVIEWS

A GUIDE TO PUBLIC OPINION POLLS. By George Gallup. Princeton: Princeton University Press, 1944. Pp. xviii + 104. $1.50.

Since the 1936 election, in which the Gallup poll dramatically demonstarted the superiority of systematic sampling over the more hit or miss straw vote, public opinion polls have come to be accepted as standard equipment for national elections. Along with this development has come a rapid expansion of research on attitudes toward public issues, proposed legislation, and the operation of going governmental programs.

Gallup's recent book is designed to inform the public about this new field. It describes briefly, in question and answer form, the organizations engaged in this research, their methods, and the place of opinion polling in modern political life. Appearing serially in newspapers just before the election, the book is for popular consumption.

Popularization of a technical subject-matter such as this is not easy. The material must be presented in an interesting manner; complicated discussions and scholarly references must be minimized. On each count Gallup succeeds admirably. His discussion of the *Literary Digest* failure is dramatic and instructive. He makes the basic idea of sampling clear, exploding completely the notion that the size of a sample is the paramount consideration. He argues persuasively for extending public opinion research to still new areas. In short, he "sells" this new public service with great skill.

The book's chief short-comings derive from an inadequate treatment of methods differing from Gallup's own. The weakness is the more serious since most of the workers in the field are named and the impression is created that Gallup is speaking for the entire field.

First, is the matter of sampling. Although area sampling (selecting specific people in specified dwelling units) has been used successfully for several years, Gallup gives it only passing mention. Rather, he defends in detail the quota method which consists of interviewing a definite number of respondents from each of several characterizing categories. While he recognizes that this method is safe only if *all* of the characteristics significantly correlated with the opinion to be measured are properly represented, he assures the reader that any such characteristic can be measured in the survey itself and checked against known totals. This reassurance fails to allay the fear that, like the *Literary Digest*, the quota sampler may sometime fail to anticipate an important correlate and thus seriously err.

Problems resulting from the differential accessibility of respondents would have interested Gallup's readers greatly although discussion of them would have cast doubt upon the quota method being so stoutly defended. A considerable body of research shows that people not usually at home on the first call are quite different from those more commonly at home. Since it is entirely possible to follow the quota method and still interview only those at home on the first call, a serious bias can result even when the quotas are properly filled.

A second deficiency is the treatment of the open question. Gallup holds that open questions can provide general descriptive information but that they can not serve to *measure* public opinion. Consequently, he makes no mention of content analysis or quantification of narrative material, leaving the impression that such procedures do not exist. Since these techniques have been used extensively for several years, this description is, to say the least, misleading.

Finally comes the interpretation of survey findings. Here Gallup concentrates on problems of "loaded" questions, interviewer bias, and techniques like the split ballot. As important as these considerations are, they miss the central issue: How does one accurately discover the significance of answers to a polling question? Accurate interpretation entails the proper placing of a respondent's answer in his larger context of thinking. At best, a choice of one of several prearranged alternatives can reveal only a fragment of a person's thinking. An analyst's freedom of interpretation is great when the respondent is not allowed to elaborate upon his answer. In such cases, an analyst's biases can influence the final interpretation as much as, or more than, the respon-

dents' answers. If, however, the respondent is stimulated to talk fully about several aspects of an issue, the conscientious analyst is confined mightily in the kind of interpretation that he can give.

DORWIN CARTWRIGHT
BUREAU OF AGRICULTURAL ECONOMICS
U. S. DEPARTMENT OF AGRICULTURE

THE PEOPLE'S CHOICE: HOW THE VOTER MAKES UP HIS MIND IN A PRESIDENTIAL CAMPAIGN. By Paul Lazarsfeld, Bernard Berelson, and Hazel Gaudet. New York: Duell, Sloan and Pearce, 1944. Pp. viii + 178.

"This is a report on modern American political behavior—specifically on the formation of votes during a presidential campaign." As such, it is one of the most significant analyses ever made in the field of public opinion. This is a pioneering study; never before has the development of votes been traced in detail throughout an entire national political campaign. Pre-convention attitudes were sampled, and then changes in attitudes as the campaign progressed, right up to election day.

The present volume is a summary of a detailed survey of approximately 3,000 voters in Erie County, Ohio, in 1940 in connection with the Roosevelt-Willkie campaign. Repeated interviews enabled Lazarsfeld and his associates to trace the effects of political propaganda statistically, especially as to who changes his thinking during an election year and why. It should be emphasized, however, that there was no attempt to predict the outcome of the election. Rather, this is an analysis of *why* people voted as they did.

Psychologically the most useful material is the discussion of the vote decision, especially of the activation effect, the reinforcement effect, and the conversion effect.

Activation: " . . . while people hesitate and meditate and imagine that they decide rationally on the better road to take, it would often have been possible to predict at the outset what they would decide to do in the end. Knowing a few of their personal characteristics, we can tell with fair certainty how they will finally vote: they join the fold to which they belong. What the campaign does is to activate their political predispositions."

Reinforcement: "Paradoxically enough, campaign propaganda exerted one major effect by producing no overt effect on vote behavior at all—if by the latter "effect" we naively mean a *change* in vote. Half the people knew in May, before the campaign got underway, how they would vote in November, and actually voted that way. But does that mean that campaign propaganda had no effect upon them? Not at all. For them, political communications served the important purpose of preserving prior decisions instead of initiating new decisions. It kept the partisans 'in line' by reassuring them in their vote decision; it reduced defections from the ranks. It had the effect of reinforcing the original vote decision."

Conversion: " . . . the people who did most of the reading and listening not only read and heard most of their own partisan propaganda but were also most resistant to conversion because of their strong predispositions. And the people who were most open to conversion—the ones the campaign managers most wanted to reach—read and listened at least. Those inter-related facts represent the bottleneck of conversion."

These quotations give some insight as to the practical value of this book to politicians. It is, of course, only a brief report based on many thousands of unpublished tables and interpretations. The general clarity of the writing is enhanced by the carefully planned charts, which were produced under the able supervision of Dr. Hans Zeisel of McCann-Erickson.

STEUART HENDERSON BRITT
NAVY DEPARTMENT
WASHINGTON, D. C.

PERSONNEL WORK IN SCHOOLS OF NURSING. By Frances O. Triggs, Ph.D. Philadelphia: W. B. Saunders Co., 1945. Pp. 237. Price $2.75.

In her preface to this book, the first published in the field of guidance for student nurses, Dr. Triggs states her purposes clearly. The book was written to serve as a beginning text book for the prospective professional counselor of nurses and as an aid to supervisors and instructors who necessarily do some counseling in their contact with students.

Dr. Triggs is a psychologist who has had excellent experience in counseling and who is at present personnel consultant for the American Nurses Association. A part of her experience has been with student nurses. She is, therefor, especially well fitted to write such a book since she knows the nursing school situation, but can speak with the objectivity of one who is not a member of the profession.

The book has four main divisions. Part One gives a review of physiological and psychological theories needed as a basis for counseling. Well written as it is, however, it seems to assume a wider and deeper knowledge of both these subjects than is usually possessed by the nurse at the very beginning of her career as a counselor. Probably she should have such knowledge already but unless she has had unusually strong undergraduate courses, she may not. Without it, this section may not be as meaningful as it should.

The second part defines the areas into which the problems of student nurses have been found to fall. It then gives illustrations and techniques for the various areas. Excellent as the chapter on Remedial Work is in itself, one is inclined to doubt the propriety of devoting so much space to such a detailed discussion of this in view of the length of the entire book. There seems the further danger that the beginning counselor would feel that this exposition was sufficient and would fail to read any of the other materials along this subject.

However, the chapter on Personal Counseling is an excellent one even though it does say so little about the adjustments necessary in the actual hospital situation, stressing rather the situations met by the student during the more strictly academic portions of the course.

Part Three is a description of testing programs, tests, and records. This is clear, understandable, and accurate. There might be some doubt as to the value of the discussion on statistical material—Dr. Triggs herself has suggested that it may be temporarily omitted—but so long as it is not substituted for a more complete study of this subject it would seem to be useful.

Part Four gives a detailed record of a student nurse in which the principles outlined in the earlier sections were put to use. This brings the book to a human and a practical close. Perhaps the only regret here is the very human that there is not as much material available on the progress of Janet through her clinical experiences as during the earlier part of her career. Perhaps this very absence stresses the point that with good initial counseling these days were far less complicated than they might otherwise have been.

The documentation is excellent throughout the book. Dr. Triggs most intimate association with schools of nursing, however, has been with those in a University setting. Her bibliography to some extent tends to presuppose that all of her readers will have access to a well stocked University library. However, there is enough material that can be obtained by most readers so that if even this were all read the sum total would be considerable.

On the whole and in spite of some lacks, this book might be profitably used by any nurse who deals with students. If she has only this one book and put into practice all that is in it, she would undoubtedly deal with these students more wisely than without it. Should she use it as it is meant to be used, for a brief introduction to wider reading and systematic study, she should gain much.

The nursing profession will owe much to Dr. Triggs.

EDITH MARGARET POTTS
PSYCHOLOGICAL CORPORATION
NEW YORK CITY

EMOTIONAL FACTORS IN LEARNING. By Lois Barclay Murphy and Henry Ladd. New York: Columbia University Press, 1944. Pp. x + 404. $3.50.

To the series of studies that have issued from Sarah Lawrence College, the present volume adds the story of the guidance program and reviews the problems that arise in assisting young women to adjust to the educational aims and viewpoint of this articulately "progressive" institution. About half the book is devoted to case studies of eleven students abstracted posthumously, but with a minimum of editing, from the records of Henry Ladd. The other half comprises Mrs. Murphy's more generalized discussion of adjustment in a women's college, examined with reference to "interests," "security," reactions to authority, tempo of development, and particularly to "personality patterns"—the "rigid," "scattered," or "superficial" types discovered at Sarah Lawrence by Ruth Monroe.

The book pays negligible attention to any other literature in the field, and any statistical treatment of the local data is highly casual. We learn, for example, that 75 per cent of first year and 67 per cent of second year work in art is taken in accordance with the girls' preferences expressed at registration. On the other hand 55 per cent of first year and 78 per cent of second year social science is taken at the instigation of the faculty, or at least in variance with the girls' registration preferences. Apparently Sarah Lawrence finds the naive interest pattern of its students overloaded in the direction of arts, language and literature and encourages a shift of attention

toward both social and natural science in preparing them for modern living. In the main, however, any quantification of the material is reduced to unsupported statements that "Approximately a quarter of the freshman class fits into the faculty expectation of competent, independent, insightful workers . . . . "; "Another fourth of the class do good work but present mild disappointments"; and the like. Other authors will not find it easy to compare notes with Mrs. Murphy or to fit this book into the literature on student adjustment. It is almost exclusively the story of some Sarah Lawrence girls, what Sarah Lawrence did about them and how Sarah Lawrence feels about its endeavors.

Guidance is interpreted as a responsibility of the entire faculty. Most of the explicit counseling is done by the "dons," but all teachers are expected to show concern for the student's total development, and to keep extensive notes of conferences which may deal with the girl's family worries, week ends in New York or the last paper on Thomas Mann. A "Student Work Committee," some of whose members are elected by the faculty, coordinates, and to some extent supervises, the endeavor. Some testing is done and psychiatric service is available when indicated.

Much could be said both for and against this approach to guidance. A sensitized faculty whose interest in biology is shared with a concern for the student as a person probably teaches a more vital and utile brand of biology. But psychotherapy is not the major specialization of teachers—even well-meaning intelligent ones. Proneness to view adjustment primarily in the academic matrix is well nigh inevitable and partial insight all too often reassures the teacher in continuing to deal with problems which demand the most subtle and expert clinical treatment.

The inadequacy of this approach is clearly reflected in a statement on page 223: "A question that cannot possibly be answered from the records is at this point very perplexing indeed: Did Louise herself feel she should be made into something else?" This remarkable admission is by no means the only point at which the authors manage to convey the impression that Sarah Lawrence girls are being "made into something else"—notably into "competent, independent, insightful workers who have sufficient initiative and imagination to carry on independent study, sufficient grasp to meet teacher demands for depth, and sufficient steadiness to do consistent thorough work"—by a faculty that lacks both technique and determination to find out which girls want to be made into this particular image. And the perplexed clinicians, reviewing voluminous records and guiding by remote control, are likewise out of touch with the girl's aspirations and her own evaluation of her needs.

CHESTER C. BENNETT
UNIVERSITY OF MISSOURI

AMERICAN ASSOCIATION FOR APPLIED PSYCHOLOGY, INC.

The object of this Association is the promotion and development of the service which psychology as a science can render society in its application in business, education, industry, law, medicine, mental hygiene, social welfare and related fields. To that end it is concerned with the development of psychological service and practice at a high level, with the encouragement and facilitation of research, and with the promotion of high professional and ethical standards. Its particular business shall be: the definition of professional and ethical standards, the improvement of training facilities in applied psychology, the conduct of meetings for the interchange of information among its members, the issuance of publications for both its members and the general public, the furtherance of cooperation with non-psychological groups, the development of new professional opportunities, and the transaction of such other business as is consistent with its primary purposes or is authorized by its Articles of Incorporation or its By-Laws.

EXECUTIVE OFFICERS

President, C. R. ROGERS, PH.D., Ohio State University, Columbus, O.
Executive Secretary, ALICE I. BRYAN, PH.D., Columbia University, New York, N. Y.
Treasurer, MARTIN A. BILLS, PH.D., Aetna Life Insurance Company, Hartford, Conn.

BOARD OF GOVERNORS

The Board of Governors consists of the President, the Executive Secretary, the Treasurer, the Chairmen of each Section, the Secretary of each Section, the Chairman and the Secretary of the Board of Affiliates, and the Chairman and the Secretary of the Board of Editors.

SECTION OFFICERS

Section of Clinical Psychology

Chairman, R. A. BROTEMARKLE, PH.D., University of Pennsylvania, Philadelphia, Pa.

Secretary, F. P. BAKES, PH.D., University of Pennsylvania, Philadelphia, Pa.

Section of Consulting Psychology

Chairman, ROSE G. ANDERSON, PH.D., Psychological Service Center, 522 Fifth Avenue, New York, N. Y.

Secretary, EMILY T. BURR, PH.D., Vocational Adjustment Bureau, 1790 Broadway, New York, N. Y.

Section of Educational Psychology

Chairman, HENRY E. GARRETT, PH.D., Columbia University, New York, N. Y.

Secretary, HELEN L. KOCH, PH.D., University of Chicago, Chicago, Ill.

Section of Industrial and Business Psychology

Chairman, C. L. SHARTLE, PH.D., War Manpower Commission, United States Employment Service, Washington, D. C.

Secretary, RENSIS LIKERT, PH.D., U. S. Department of Agriculture, Washington, D. C.

Section of Military Psychology

Chairman, C. M. LOUTTIT, PH.D., U. S. Naval Training School, Camp MacDonough, Plattsburgh, N. Y.

Secretary, W. A. HUNT, PH.D., U. S. Naval Training Station, Newport, R. I.

OFFICERS OF BOARD OF EDITORS

Chairman, BERTHA M. LUCKEY, PH.D., Board of Education, Cleveland, O.
Secretary, MYRA KUENZEL BEANE, M.A., General Protestant Orphan Home, Burnet and Melish Avenues, Cincinnati 19, O.

REPRESENTATIVES TO BOARD OF EDITORS

(Year in which term expires is shown in parenthesis.)

Section of Clinical Psychology: BERTHA M. LUCKEY, PH.D. (1948), C. M. LOUTTIT, PH.D., (1947), MARIE SKODAK, PH.D. (1946), E. A. DOLL, PH.D. (1945).
Section of Consulting Psychology: A. T. JERSILD, PH.D. (1948), M. R. TRABUE, PH.D. (1947), ALICE I. BRYAN, PH.D. (1946), CATHERINE C. MILES, PH.D. (1945).
Section of Educational Psychology: W. C. TROW, PH.D. (1948), A. I. GATES, PH.D. (1947), P. M. SYMONDS, PH.D. (1946), C. R. ROGERS, PH.D. (1945).
Section of Industrial and Business Psychology: SADIE M. SHELLOW, PH.D. (1948), A. D. FREIBERG, PH.D. (1947), J. L. OTIS, PH.D. (1946), V. P. SCHEIDT, PH.D. (1945).
Section of Military Psychology: C. G. WRENN, PH.D. (1948), E. L. KELLEY, PH.D. (1947), H. M. BELL, PH.D. (1946), T. W. HARRELL, PH.D. (1945).
Board of Affiliates: MYRA KUENZEL BEANE, M.A. (1945).

REGIONAL AFFILIATED SOCIETIES

BOARD OF AFFILIATES

Chairman, J. N. YEPSEN, PH.D., Department of Institutions and Agencies, Trenton, N. J.
Secretary, G. J. RICH, PH.D., 515 Public Safety Building, Milwaukee 2, Wis. *Society Representatives*: J. D. JACKSON, M.A. (N. J.), J. G. PEATMAN, PH.D. (N. Y.), C. A. FORD, PH.D. (Pa.), R. W. WASHBURN, PH.D. (Mass.), H. E. O'SHEA, PH.D. (Ind.), G. A. KELLY, PH.D. (Kan.), M. M. RATLIFFE, PH.D. (Ky.), M. R. BRANE, M.A. (O.), G. J. RICH, PH.D., M.D. (Wis.), S. H. BRITT, PH.D. (Washington-Baltimore), S. E. HAVEN, PH.D. (Mich.), J. G. DARLEY, PH.D. (Minn.), A. I. BRYAN, PH.D. (Metropolitan N. Y.), *Section Representatives*: G. L. RILEY, M.A. (Clinical), C. C. MILES, PH.D. (Consulting), A. T. JERSILD, PH.D. (Educational), RENSIS LIKERT, PH.D. (Industrial), O. C. HELD, PH.D. (Military).

NEW JERSEY ASSOCIATION OF PSYCHOLOGISTS, 1937

President, J. D. JACKSON, M.A., Trenton State Prison, Trenton, N. J.
Secretary, EDNA E. LEMSON, PH.D., State Teachers College, Jersey City 5, N. J.

NEW YORK STATE ASSOCIATION FOR APPLIED PSYCHOLOGY, INC., 1937

President, H. D. WILLIAMS, PH.D., New York State Training School for Boys, Warwick, N. Y.
Secretary, GLADYS TALLMAN, M.A., Neurological Institute, New York, N.Y.

PENNSYLVANIA ASSOCIATION OF CLINICAL PSYCHOLOGISTS, 1938

President, M. S. VITELES, PH.D., University of Pennsylvania, Philadelphia, Pa.
Secretary, MARY I. ELWOOD, PH.D., Board of Education, Pittsburgh, Pa.

MASSACHUSETTS SOCIETY OF CLINICAL PSYCHOLOGISTS, INC., 1939

President, S. G. ESTES, PH.D., Emerson Hall, Harvard University, Cambridge, Mass.
Secretary, R. W. WHITE, PH.D., Harvard Psychological Clinic, Cambridge, Mass.

INDIANA ASSOCIATION OF CLINICAL PSYCHOLOGISTS, INC., 1939

President, HARRIET R. O'SHEA, PH.D., Purdue University, Lafayette, Ind.
Secretary, R. C. SCOTT, PH.D., Ball State Teachers College, Muncie, Ind.

KANSAS STATE ASSOCIATION OF CONSULTING PSYCHOLOGISTS, 1939

President, EDWINA A. COWAN, PH.D., Wichita Child Guidance Center, Wichita, Kan.
Secretary, P. G. MURPHY, PH.D., Kansas State Teachers College, Pittsburg, Kan.

KENTUCKY PSYCHOLOGICAL ASSOCIATION, 1939

Chairman, J. E. BREWER, PH.D., Mental Hygiene Clinic, Louisville 2, Ky.
Secretary, PAULINE KLINGER, M.A., Ormsby Village, Anchorage, Ky.

OHIO PSYCHOLOGICAL ASSOCIATION, 1939

President, EMILY L. STOGDILL, PH.D., Ohio State University, Columbus, O.
Secretary, R. C. KAMMERER, PH.D., Bureau of Juvenile Research, Columbus 4, O.

WISCONSIN ASSOCIATION FOR APPLIED PSYCHOLOGY, 1939

President, W. W. BIDDLE, PH.D., Milwaukee State Teachers College, Milwaukee, Wis.
Secretary, G. J. RICH, PH.D., M.D., Milwaukee County Guidance Clinic, Milwaukee, Wis.

WASHINGTON-BALTIMORE BRANCH OF AMERICAN PSYCHOLOGICAL ASSOCIATION, 1940

President, MAX MEENES, PH.D., Howard University, Washington 1, D.C.
Secretary, W. D. COMMINS, PH.D., Catholic University, Washington, D. C.

MICHIGAN PSYCHOLOGICAL ASSOCIATION, 1941

President, RUTH M. HUBBARD, PH.D., Consultation Bureau of Detroit, Detroit, Mich.
Secretary, P. H. VOELKER, PH.D., Detroit Public Schools, Detroit, Mich.

MINNESOTA SOCIETY FOR APPLIED PSYCHOLOGY, 1941

Secretary, LINDSEY HARMON, PH.D., 5200 44th Avenue South, Minneapolis, Minn.

METROPOLITAN NEW YORK ASSOCIATION FOR APPLIED PSYCHOLOGY, 1942

President, W. H. WULFECK, PH.D., Federal Advertising Agency, 444 Madison Avenue, New York, N. Y.
Secretary, BLANCHE C. WEILL, ED.D., 479 West 24 Street, New York, N. Y.